REPORT RESUMES

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CASE STUDIES OF CHILDREN'S THINKING ABOUT SOCIAL PHENOMENA.

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THE RELATIONSHIP BETWEEN THE LEARNING OF LAW BY INDIVIDUAL CHILDREN IN A SOCIAL STUDIES SETTING AND THE THINKING THEY BROUGHT TO THE INSTRUCTIONAL SITUATION WAS EXPLORED. ASPECTS OF CIVIL LAW AND THE LITIGATION PROCESS WERE TAUGHT AND STUDIED FOR 20 HOURS IN TWO SIXTH-GRADE CLASSES. FIVE CHILDREN IN EACH CLASS HAD BEEN SELECTED IN ADVANCE FOR INTENSIVE CASE STUDY. TESTS, INTERVIEWS, AND OBSERVATIONS WERE CONDUCTED BEFORE, DURING, AND AFTER THE LAW INSTRUCTION. IN THIS REPORT, THE CASE STUDIES OF TWO NEGRO BOYS FROM INTACT, LOWER MIDDLE-CLASS FAMILIES WERE PRESENTED. THE BOYS WERE COMPARED ON CREATIVE THINKING, ABSTRACT THINKING, AND COGNITIVE APPROACHES TO PROBLEMS INVOLVING LAW. THE BOYS' PERFORMANCE ON NONLAW PROBLEMS, BOTH SOCIAL AND NATURAL, WERE ALSO STUDIED. THE REPORT DISCUSSED THE CHILDREN'S THINKING IN TERMS OF THE INFLUENCE OF PERSONAL CONCEPTIONS OF THE INTERPRETATION OF THE INSTRUCTIONAL MATERIAL AND THE RELATIONSHIP OF COGNITIVE DEVELOPMENT TO SOCIAL STUDIES THINKING. THE AUTHOR CONCLUDED THAT (1) THE STUDY PROVIDED NO ANSWER TO THE QUESTION OF HOW A CHILD'S BASIC CONCEPTIONS LIMITED OR FACILITATED THE ACQUISITION OF SPECIFIC INFORMATION AND MEANINGS, AND (2) LEARNING OR "THE RECONSTRUCTION OF A CHILD'S THINKING" MUST CONSIST OF COMPLEMENTING WHAT EACH CHILD HAS IN THE WAY OF STYLE AND BASIC CONCEPTONS. (GD)

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CASE STUDIES OF CHILDREN'S THINKING ABOUT SOCIAL PHENOMENA

By

Joseph C. Grannis

February, 1967

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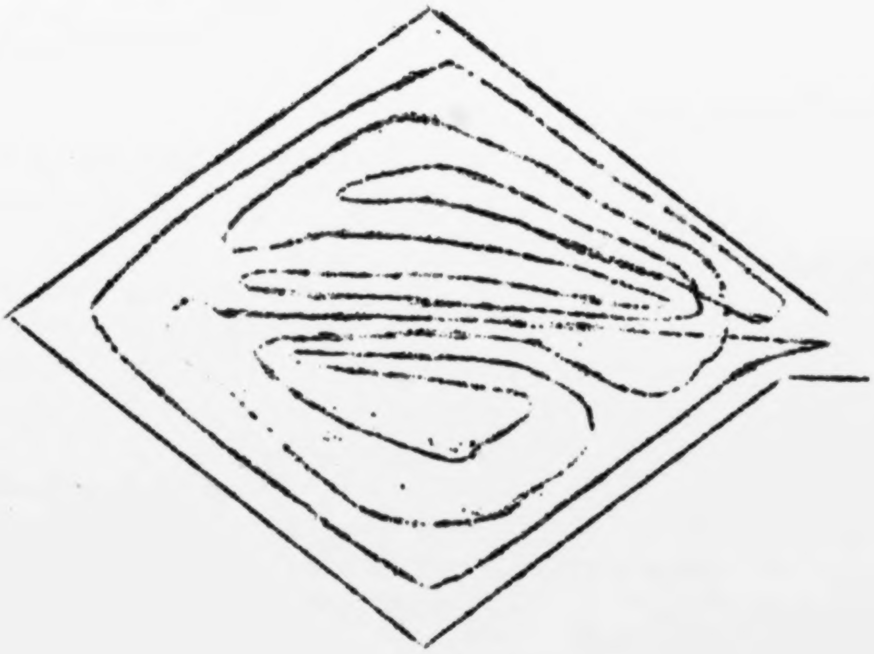
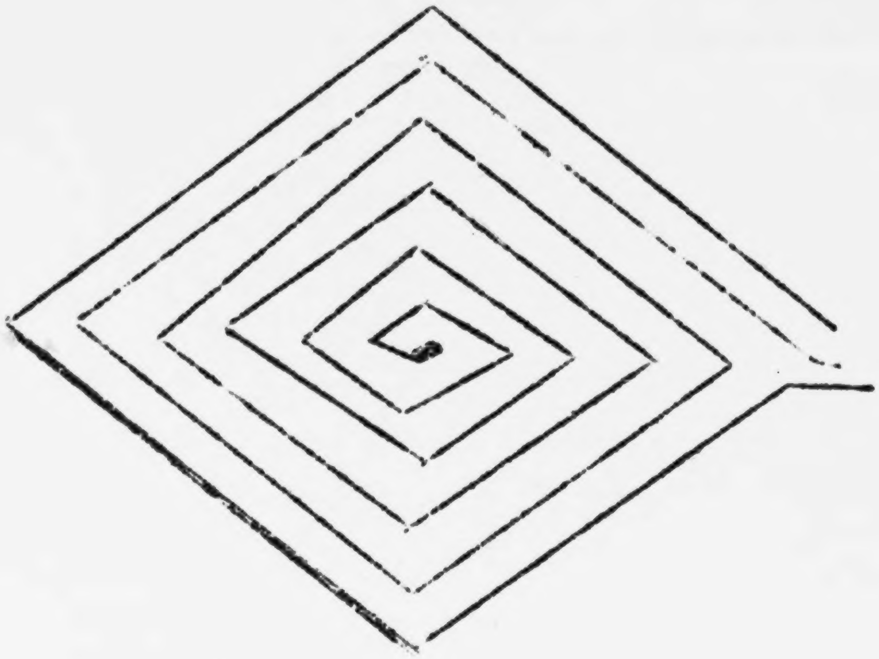
Ronald's and Keith's solutions to the
Stanford-Binet 'Plan of Search' problem.



Ronald's solution: divergent and unacceptable (though one can hardly doubt that Ronald would find the missing purse).



Keith's solution: convergent and acceptable.

TABLE OF CONTENTS

PREFACE

CHAPTER I: RATIONALE AND PROCEDURE 1

Generally what we did 4
Where we started 5
The law instruction. 9
Methods of studying the children 12
The two case writeups 17

CHAPTER II: RONALD 18

The Lumberyard Case 18
Ronald's concepts of law and society 26
The style and development of Ronald's thinking 39
Ronald's family and school history 61

CHAPTER III: KEITH. 73

The Lumberyard Interview. 74
Keith's conceptions of law and society. 82
The style and development of Keith's thinking 95
Keith's family and school history. 108

CHAPTER IV: SUMMARY AND CONCLUSIONS. 117

The process of the children's thinking. 118
Implications of the case studies for us as teachers 126
Hypotheses for further investigation 135

BIBLIOGRAPHY. 137

ERRATA

page 3. Instead of *Creativity and Intelligence* read *Modes of Thinking in Young Children*.

page 4. Instead of vigorously read rigorously.

page 9. Instead of (Kemp, 1964:) read (Kemp, 1963;).

pages 18-21. Instead of 'M' in the Lumberyard Interview read 'R' (Ronald).

page 36. Instead of "the father as a semi-skilled garage attendant" read "the father as a Post Office janitor"

page 45. Instead of "from each of the 6 subtests" read "from each of six subtests"

page 46. Instead of "not trying to rattle him." read "trying not to rattle him."

page 50. Instead of "a variety of" read "a greater variety of"

page 51. Instead of (Werner, 1948) read (Werner, 1957).

page 55. Instead of resume read resumé.

page 60. Instead of "Ronald checked 'No' and Keith 'Yes'" read "Ronald checked 'NO' and Keith 'yes'"

page 71. Instead of "English teacher spoke of him" read "English teacher (interviewed in November 1966) spoke of him"

page 72. Instead of "Once could say" read "One could say"

page 79. Instead of "that equips Keith well" read "that should equip Keith well"

page 81. Instead of "only identifies the question as" read "only identifies the shutter question as"

page 83. Instead of "thinking into the Lawyer Dialogue" read "thinking into both the Lawyer Dialogue"

page 89. Instead of "We might argue with" read "We might agree with"

page 90. Instead of "we fied things somewhat" read "we oversimplified things somewhat"

page 91. Instead of "Keith has supported aloud" read "Keith had supported aloud"

Biblio. Add: Fenton, Edwin. "Social Studies Curriculum Reform: An Appraisal." Carnegie Institute of Technology, 1966. (mimeographed)

page 138. Instead of Uygotsky read Vygotsky.

PREFACE

Though from the outset the project described in this paper proposed to study the thinking of individual children in social studies, we had little idea, for some time, of what "individual" might mean in this context. Our initial thoughts, therefore, were focused more on the material we proposed to develop as a tool for studying the children, especially a unit on civil law and the process of litigation. We conceived of this unit as an instrument that could be used repeatedly with children, to study their individual ways of learning.

Our commitment to the law unit as such has waned considerably in this project as we have come closer to knowing the children we have taught. This is not because law has seemed to be inappropriate for the children to study, for, on the contrary, their interest and capacity have exceeded our expectations in many ways. Rather, too many hypotheses about the children themselves have been opened up and need to be explored in ways that do not permit us to be tied at this time to the development of a particular body of knowledge. We may return to the construction of law materials in another year if our understanding of the children and our resources permit us then to develop a far more responsive and powerful research and teaching instrument than we could fashion now. For the present, the law "unit" exists chiefly in the minds of its teachers and pupils, in the assortment of brief readings and exercises that were prepared for the children in 1965-66, and in the data which is recorded in this report. The unit lies in the report like a geological layer, a witness to our original approach to the children and a foundation of our subsequent work with them.

In 1966-67, following our completion of the analysis of the law study data, we have turned to a new group of children in a new setting, with a more specific set of questions. We are particularly interested in individual children's explanations of social phenomena, especially the relationships between their ways of explaining and their cognitive development, their moral and social development, and their style of thinking. That these are centrally related, one might say governed, in the personalities of individuals, was the major hypothesis to emerge from last year's explorations and is the main theme of our present research.

CHAPTER I

Rationale and Procedure

How do children think in social studies? In a sense a great variety of investigations, of the concepts and interests of children of different ages or of different social classes or intelligence, of children's capacity for problem solving or critical thinking, of their tendencies to narrow or open mindedness, and so on, all contribute to our understanding of children's thinking in social studies. However, one feature of this research may make it very difficult for a teacher to apply in his classroom. Invariably the findings of the research are reported in terms of groups, whereas the teacher must deal first and foremost with individuals. This emphasis of research on groups severely limits the specificity of the phenomena that can be explained, for until quite elaborate models of thinking can be developed for social studies, together with quite complex research designs and instruments for investigating this thinking, only very gross generalizations can be made (Keisler, 1966). Individual children vary enormously with respect to these generalizations, or, to say the same thing in a different way, many factors that have been randomized in groups interact in individuals with the relatively few factors that have been consciously manipulated or controlled. Thus Oliver and Shaver (1966), who have made the most progress in tracking down interaction effects in social studies, particularly between various aspects of student personality, teaching style, and learning outcome, comment more than once on the tenuousness of their findings and the likelihood that other, as yet unidentified factors are involved.

Recently we have wondered what would result if, in our own research, we began by concentrating on individuals and making intensive case studies of just a few children. The idea was not so much that we would get more data on these children. Oliver and Shaver, to cite their research again, collected more data, though it was not as varied, on each of the more than 100 subjects of their experiment than we have on any of the 10 subjects of the research to be reported in this article. However, the focus is different. It was our hunch that by trying to integrate our observations in terms of each separate child we might accomplish several ends:

1. We might obtain a more fine-grained picture of the process of individual children's thinking in social studies.

2. We might get a feeling of how the pieces fit together in individual children, their unique input and the teacher's input, in a way that would be especially useful to us as teachers.
3. We might come up with new dimensions in the children's behavior, or at least discover aspects of their thinking and performance that we ourselves, if not others, had previously neglected.

This is the perspective of the clinical study of individuals. We would like to procede at once to talk of what we did, but it would be misleading not to recognize first in what way the case study depends upon or is complemented by the study of groups. As soon as we speak, as indeed we shall, of an individual's scoring relatively high or low on any instrument, we are comparing him with others. Where the scores are standardized, we can compare the individual with many others. For a number of the observations we have made in the present study we can only wish that we had standardized scores or ratings, and must be content with comparisons among our few subjects. Of course it is the relationships between these scores, for example between IQ and creativity scores, that interest us, and research on groups may tell us which relationships to expect. The same can be said of qualitative observations that have been associated with each other in groups, for example, male or female and dominant or submissive roles. Where an individual case conforms to patterns established in groups we have a lead on the dynamics of the individual, and where it departs we are alerted to search for complicating factors. The most powerful research would combine the study of groups and individuals, perhaps alternating between the one focus and the other. White's Lives in Progress (1952) is a classic example of the case study explicitly informed about a great variety of investigations of groups, while Wallach and Kogan's Creativity and Intelligence (1965), in addition to reviewing related research, presents the results of a single investigation in both group and individual case study form. The function of the case studies in the Wallach and Kogan report, however, is more to illustrate than to go beyond or complicate the generalizations based on groups. We would like to use the case study in the second, more demanding way.

In the present study we have fallen, or started, far short of the ideal. We have data on too few subjects to know, on most counts, the normative significance of our observations on the individual children. There is little play back and forth here between statistical and case studies of interacting factors or phenomena. Our intention from the outset was to concentrate squarely and naively on the individuals and to develop hypotheses for later, more vigorously controlled research.

It happens that our study in 1965-66 was conducted in two quite disparate settings, a combined 5th and 6th grade class in a suburban private school with mostly white pupils and a 6th grade class in an inner-city public school with all Negro pupils. We say it "happens", not because it was not intentional, but because the intention was, again, to focus on just a few individuals within each group, not to compare the groups as such. We wanted simply to increase the variance of our subjects, especially with respect to the personal experience and concepts that each subject might bring to bear on social studies. In presenting our findings we will confine ourselves for the most part to just two cases, both of them taken from the inner-city classroom.

Generally what we did.

We taught law to the children in each classroom for about 20 hours and in addition we conducted a variety of tests and interviews with each of our case subjects to try to understand their thinking about law.

Our research team consisted of five persons, a specialist in curriculum research, a specialist in child development, two graduate assistants, and a lawyer.* Law, especially civil law and the process of litigation, had been chosen as the general topic to be pursued with the children, on the assumption that they would not have studied it previously in school but that it was potentially relevant to their lives and past experience. The staff spent most of the 1965-66 fall term developing and clarifying its own concepts of law and preparing resources for use with the children. Some preliminary assessment of the children's concepts of law was carried out at this time and 5 children, all males, were selected from the 20 or so children in each classroom to be the subjects of the case studies (10 subjects altogether). The basis for this selection was quite unscientific, viz., those boys who already stood out in our minds, as eventually all would, as distinctly "different" from one another. Girls were not included because we were, for the time being, less interested in variance due to sex role.

---

* In the order designated, Joseph C. Grannis, Esther P. Edwards, James Charbonnet, Sharlene Pearlman, and Howard Cohen.

In the spring term we taught all of the children in the first classroom for about 20 hours over a 5 week period and observed, tested, and interviewed the first 5 case subjects in and out of class both during and for several weeks following the period of instruction. The process was then repeated for the second class, with some changes of material and procedure, both in the instruction and in our study of the children. Most of the analysis and synthesis of the data was completed during the summer of 1966, with some returning to the neighborhoods of the case subjects to test and talk with them again as new hunches needed checking out.

Where we started.

We began with few expectations, and these very rough, of what the children would be like and would do. Our acquaintance with the literature on children's thinking in social studies had placed us somewhat in the position Arthur Cohen found himself in when he had completed his review of the research on certain aspects of attitude change:

> In brief, if we have learned anything in this chapter, it is not the universal validity of any propositions...what we have learned is to become sensitive to certain kinds of psychological process (Cohen, 1964, pp. 35-36).

Our project began with two general sets of interests. First, we wanted to investigate the relationship between the concepts a child brings to the learning situation in social studies and his interpretation of the material of instruction. Second, we wanted to explore how a child's thinking in social studies relates to his cognitive development, especially his capacity to organize concepts hierarchically and his ability to use generalizations in interpreting social or natural phenomena.

The first of these interests stemmed from the investigator's long standing commitment to the idea of education as "the reconstruction of experience". Now was the time to ask specifically what this idea might mean. McKeachie has stated,

> ....we need a great deal of research to learn how we can look into the conceptual system a child has, and use it as a framework for the development of new concepts or for the expansion and differentiation of relevant concepts he already has. We need to diagnose the nature of children's conceptual systems -- their inclusiveness, their personal relevance, their ties to one another. Otherwise we are likely to attempt to teach concepts rich with significance for the social scientist but empty of meaning for the child (McKeachie, 1964, p. 85).

Many studies over the past 40 years have examined the percentages of children at different grade levels who have attained the accepted meanings or usages of terms commonly employed in social studies (Mugge, 1962). Relatively few investigations have been made of the children's own concepts, and very few have been directed toward their conceptions of complex regions of social phenomena. Thus we have studies like that of Smith and Cardinell (1964), which reports children's concepts of isolated terms like honesty, India, river, Washington, and so on, but only in the areas of children's conceptions of time (e.g., Edwards, 1964), race or ethnic matters (e.g., Goodman, 1952), and government and politics (e.g., Greenstein, 1965; Hess, Tourney, and Jackson, 1965) do we have studies of children's conceptions in any depth. The existence of this last cited research on children's conceptions of govennment and politics, as well as the potentially related research of Piaget (1932) and Kohlberg (1958) on children's moral judgment was another reason for our selection of law as the subject matter of our work with children.

From the research on children's conceptions of government and politics we could expect 6th graders in general (and thus be surprised by individuals or not, as the case developed,) to give strongly positive responses to general items praising the nation, the government and prominent roles in the government like the President and the policeman. We could anticipate that 6th graders would tend, as 4th graders would not, to recognize the primacy of Congress over the President in the making of laws, though they could not generally be expected to be aware of more complex aspects of the process like the roles of the political parties (Greenstein, 1965; Hess et al, 1965). From Hess's findings we might expect the children of lower socio-economic status in our sample to have no less positive views of government than the children of higher status, indeed to think even more favorably of policemen than do their higher status counterparts, but to be somewhat less aware of or sanguine about their own prospects for affecting the affairs of government (Ibid). However, Negro children were not included in the Hess data, and not differentiated from whites by Greenstein; since the children of relatively lower status in our two classrooms were Negro, we wondered if knowledge of the movement for Negro rights and the clashes between Negroes and white officialdom might not have reversed these children's attitudes toward the possibility of participation and might have tempered their positive feelings toward the government, or at least toward policemen.

From Piaget's research we could expect 6th graders to have come to the general realization that rules and laws are made by men and can be changed by men, and at the same time we could expect them to be very strong in their verbal adherance, at least, to the particular rules with which they are familiar or which they have accepted as "the rules of the game". We could also anticipate that the children would take into account the intentions of someone who has done something, not just the consequences of his act, and would think more in terms of preventative or restitutive purposes than sheer retribution in determining the punishment for an act. However, there are some problems in all of this. In the first place, Piaget argued that children developed these ideas of rule and law through their working out of peer group relationships, and he dealt only with fairly simple matters of conventional morality and games. Would the ideas extend in school to the relatively unfamiliar legal matters that we intended to present to the children? A second problem was posed by our reading of Jerome Frank's Law and the Modern Mind (1932). Though Frank based much of his own reasoning on Piaget's early work (published before The Moral Judgment of the Child (1932),) he arrived at a somewhat different conclusion from Piaget's about children's idea of the origins of law. According to Frank, children and lawyers alike (at least lawyers a generation ago) subscribe to a view of law that does not recognize the ways in which men in fact change and shape laws to suit their needs. Frank traced to childhood the lawyers' beliefs that laws are "discovered" by the judicial process rather than made in it, and, more generally, that laws are infallible and unchanging. In our preliminary speculation we wondered if Frank had gone too far and had ascribed to children a position judges and lawyers had developed to enhance their own wisdom, or if, again, Piaget's more generous interpretation should be restricted to the rules children actually use in their own groups.

Our own thinking about law, as we prepared to meet the children was much influenced by the legal realism of Frank and his successors and by a more general sociological view of law:

> Law is an institution in the sense of an integrated pattern or process of social behavior and ideas. What goes on inside courts, legislatures, law offices, and other places in which law-making, law-enforcing, law-administering, and law-interpreting is carried on, together with what goes on inside the minds of people thinking with reference to what goes on in those places, forms a law way of acting and thinking, which overlaps but is not identical with economic, religious, political and other social ways of acting and thinking (Berman, 1958, pp. 8-9).

We can put off for a moment a specification of the ideas that we wanted to teach. Here let us observe a fundamental problem that developed in our pursuit of the relationship between the children's concepts of law and ours. It was our intention to dope out the children's concepts or conceptual systems through four instruments administered before the onset of instruction: a multiple choice test, a card sorting exercise, and two oral interviews, all designed by us. We would then observe and attempt to facilitate the reconstruction, or the expansion and differentiation of the children's concepts through some 20 hours of teaching. In fact, far from this simple plan, we found we were only beginning to grasp the children's concepts toward the end of the instructional period itself. The reason for this, apart from the clumsiness of this first effort, is that what appear now as the more fundamental concepts in the children's individual systems were not anticipated by us and only gradually became evident, not in direct statements or choices by the children, but in the pattern of their reactions to the whole variety of material with which they were confronted. Consequently, this report will not claim that we influenced the children at all on the most basic levels of their thinking. Certainly they learned some details about law, and in varying degrees they began to learn to use certain legal principles. However, as to the overall framework of their thinking about law, it makes most sense to treat our entire engagement with the children as an extended period of inventory and assessment.

Similar comments pertain to the second of our main thrusts, the attempt to explore the relationship of a child's thinking in social studies to his cognitive development. Some investigators (Taba, 1964) have claimed that children as young as 10 can be led to make generalizations about social phenomena, while others (Inhelder and Piaget, 1958) have observed that these generalizations may not acquire formal significance for children until adolescense. While we began with the intention of assessing and then influencing the children's use of fairly specific operations, for example their interpreting general rules and analogizing between cases, we slowly became aware of stylistic features of the children's thinking that appeared to override or color the particular operations we sought to develop. Indeed, it seems to us now that these styles might merge with the children's basic conceptual frameworks at a level that extends to their very personalities. We have only enough evidence at present to hint at this, but it is the major hypothesis to be developed in this report and thus we have stated it before providing any details. The idea that an individual's style of thinking and his social concepts might be integrated at the level of personality is, of course, not new to psychology (Adorno, Frenkel-Brunswik, Levinson, and Sanford, 1950). However, only in research on "critical thinking" (Kemp, 1964; Oliver and Shaver, 1966) has even a beginning been made in exploring the functions of personality in social studies thinking.

The law instruction.

The result of our preliminary reflection about law was a set of a dozen or so generalizations, together with materials and activities with which we might investigate these ideas with the children. Here is a sample of the generalizations:

A. Laws distinguished from rules, customs, habits.

. . . .

3. A law applies to all persons in a society or in the jurisdiction of the government that maintains the law.
4. The law could not be maintained without sanctions. The state has special sanctions for enforcing the laws, but the

state does not have unlimited sanctions.

. . . .

B. Judicial process and the resolution of disputes.

  6. Without institutionalized or regular ways of resolving disputes, life among men would be chaotic. Courts are a special case of these institutions.

. . . .

  8. Men are fallible and they have prejudices: the rules and procedures of the law do not prevent them from making mistakes in court.

. . . .

C. The law in time.

  11. The law conserves many ways of thinking and acting from the past.

  12. The decisions of courts must reconcile the precedents of the past with the changing circumstances and values of the present.

Like all generalizations these have only an approximate relationship to reality and they are only a few of many that we could have stated about law. We hoped that the children would come up with ideas related to these, but we did not know in what form or order to expect them, and we did not feel that we had to "cover" all of our own generalizations. *As it turned out, our discourse with the children, either in class or in individual sessions, almost never occurred on this level of abstraction. The generalizations have been stated here to tell the reader more about us than about the children*, though this will help to elucidate what the children *were* thinking as we examine two individual subjects below.

The content of the instruction, or the material in which we engaged the children, can be outlined as follows:

Phases of the law instruction.

I. Liability. Relating various cases to general rules of manufacturers' and employers' liability.

II. Initiating a law suit. Continuance of liability questions with emphasis on alternative ways of resolving a conflict and the sanctions of the court.

III. Preparation of the defense. Further development of liability with attention to the lawyer's attitude toward his client and the case. Building a case. Pretrial conference.

IV. The trial. Exploration of a contract case through a mock trial, with emphasis on procedure of jury selection, questioning of witnesses, and charge to and deliberation of the jury. Comparison to Eskimo song duel.

V. Appeal. Consideration of various bases for appeal: procedural mistrial, inappropriateness of the judge's charge to the jury. The historical development of a rule of law.

Again this is too much to cover. We passed from one phase to another more to change the pace than because the children had dealt adequately with any material or problem. The activities included whole class and small group discussions of cases, talking with a lawyer, sort card exercises, a mock trial, and listening to stories and a recorded dramatization.

Our selection of topics for study was not contingent on the children's particular interests because we were not prepared under these circumstances to obtain comparable data on our case subjects. This monopolization of the planning severely limited our opportunities for studying the children. Their choices of topics, or their individual routes from one topic or question to another, would be most important to study, especially in relation to the children's individual conceptual systems and styles of thinking. The ideal situation would include a multimedia laboratory or resource center in which individual children's particular lines of inquiry could be tracked and facilitated (Grannis, 1964). That even our interviews of the case subjects were determined more by what we wanted to find out about the children than by what they wanted to find out, about law or about us, will be evident to the reader from the quotations.

More about the law instruction can be inferred from the two case studies, but we do not intend to give a complete account of it. Our interest lies less in the law material than in the children themselves. In effect, the children's performance in the law classes posed problems for us which we then pursued in a variety of ways to be indicated in the next section. In writing up the cases we have organized our data with regard more to salient features of the children's thinking than to the sequence of our own operations.

Methods of studying the children.

While most of what is written in this section would apply to all 10 of our case subjects, there are details that vary from one subject to another and, more important, several procedures (those asterisked in the list below) which were followed only with Ronald and Keith, the two subjects presented in this report. To simplify things we will discuss our methods in terms of Ronald and Keith alone.

We saw the boys just four times before the onset of the law instruction, each time as we came to the school to administer a different test or interview designed to tap their preliminary concepts of law and society. We tape recorded only a few of the 20 general class sessions on law, but kept notes on the boys' performance in these sessions, both large and small group. Each week of instruction was followed up, generally at the beginning of the next week, with an interview of the subjects individually on the material we had been studying with them in class. Because we wanted to form our first impressions of the children in terms of their law thinking alone, we waited until the third week of instruction to begin conducting auxilliary (nonlaw) tests and interviews. These inventories continued intermittently for three months following the end of the instruction. The administration of some instruments, for instance the Stanford-Binet Intelligence Test and the Kohlberg Moral Development Interview, had been planned before we worked at all with the children. Others, for example the Wallach and Kogan creativity tests and the Belanger pendulum experiments, were resorted to as we developed particular leads about the children. We will now list these various tests and interviews, with a brief comment on each. The dates are those that the inventories were administered to Ronald and Keith.

December, 1965. The Society Game, a card sorting exercise designed to elicit the children's conceptions of how various elements of society relate to one another, technology, education, government, and so on. From a deck of 32 titled picture cards the children selected cards they thought were consistent with certain cards we gave them as starters. The children were also asked to tell how they thought certain subsets of cards belonged together.

February, 1966. First Multiple Choice, a set of 18 items intended to sample the children's conceptions of the roles of various figures in a trial, the rights of a defendent, the powers of a court, etc.

February, 1966. Original Interview, a set of 5 problems that we discussed with the children, including a "Lord of the Flies" situation, the problem of a judge confronted by a case with no exact precedent, and others.

April, 1966. First Problems, an interview that presented 4 different situations of conflict, between two individuals, an individual and a company, an individual and the government, and two nations. We were interested in whether the children would resort to legal institutions to resolve any of these conflicts.

May, 1966. The Broken Leg and Bad Silk Cases, employer's and manufacturer's liability cases respectively, an interview to find out how much transfer of thinking there was from the liability cases discussed in the first week of class.

May, 1966. The Lumberyard Case, an interview following the second week to assess the children's development of the liability concept and their capacity to construct arguments for two sides of a case.

May, 1966. The Kohlberg Moral Development Interview. We presented 4 of the 10 dilemmas in the Kohlberg battery. The interview taps many facets of thinking about complex interpersonal problems, especially the subject's capacity or disposition to see a moral problem from the standpoint of various parties and his ability to relate a case or a decision to general principles (Kohlberg, 1958).

May, 1966. The Lawyer Dialogue, an interview in which the subject is seated with a child from another classroom and asked to explain to the other "what a lawyer would do and think" in response to a situation that is unfolded through the following sequence of statements, each on a separate card:

1. Mr. Smith walks into a lawyer's office and says his car hit another car.
2. Mr. Smith's lawyer now has two weeks to prepare his case before the trial begins.
3. The lawyer for the other side has just finished questioning his first witness in the trial.

4. The lawyer for the other side is a friend of Mr. Smith's lawyer.
5. Mr. Smith's lawyer thinks the other side has a much better chance of winning.
6. Mr. Smith is unpleasant and gets on his lawyer's nerves.
7. Mr. Smith's lawyer thinks Mr. Smith should have been more careful in his driving.
8. The judge hearing Mr. Smith's trial is a good friend of Mr. Smith's lawyer.
9. Mr. Smith suggests to his lawyer that they get someone to pretend to have witnessed the accident and to testify in favor of Mr. Smith.
10. Somebody says to Mr. Smith's lawyer that lawyers just make trouble for people.
11. Mr. Smith's lawyer thinks the decision of the court was not fai to his client.

May, 1966. Stanford-Binet Intelligence Test, administered by us. The analysis of a child's performance on different kinds of items is as valuable for our purposes as the child's overall score.

May, 1966. Law Attitude Inventory, a 21 item test that asks the subject to respond positively or negatively to statements concerning people's rights, the complexity of legal problems, and the efficacy of individuals in dealing with legal situations.

June, 1966. Abstract Categorizing Test, a word sorting exercise that estimates a subject's ability and disposition to organize social terms hierarchically. In a previous study, performance on this test correlated significantly with a subject's inductive learning of abstract social concepts (Grannis, 1965).

June, 1966. Second Multiple Choice, a test that asks the subject to assign relative priorities to different explanations of law phenomena, for example:

7. Why do law change over the years?

____Laws come out of people's ways of living, and because these change over time, laws must change too.

____Judges make different decisions, and each new decision changes the law a little.

____People forget the old laws, so new ones have to be made.

June, 1966. Last Problems, an interpersonal conflict problem where again we wanted to see if and how the subject resorted to legal institutions, and especially to find out what understanding he had of the sanctions available through the law.

June, 1966. The Belanger Pendulum Experiments, a sequence of 4 experiments relating to the period of the pendulum and its weight, length, amplitude, and push. This requires 4 sessions with the children individually, as well as pre- and post-tests administered to the group, from all of which one can make inferences about the children's ways of formulating and checking hypotheses about natural phenomena. Professor Belanger, of the Harvard Graduate School of Education, has adapted the Piaget pendulum problem to his own investigations of children's science thinking.

July, 1966.* The Wallach and Kogan Creativity Tests. We used some of the items from each of 6 subtests: Alternative uses, Pattern meanings, Instances, Physiognomic sensitivity, Similarities, and Line Meanings (Wallach and Kogan, 1965).

July, 1966.* Followup Interview, a variety of questions concerned with the boys' feelings about school, about Negro-white relations, about policemen, and so on, as well as some conversation to explore further how the boys understood generalizations, for instance, "People always have to adapt their ways to the place where they live."

August, 1966.* Easton and Hess Questionnaire on Government and Citizenship. The questionnaire (Hess, Torney, and Jackson, 1965) was administered to Ronald and Keith together and then a followup interview was conducted with each boy separately, to clarify and enlarge their responses to certain items.

It might be objected that our subjects, especially Ronald and Keith, were tested and interviewed to a degree that would somehow invalidate our findings. Two or three of our subjects did indeed seem to turn us off after a point, but with the others we established a relationship of mutual respect and enjoyment that continued to the end of the investigation. Our interviewing and testing of the children was done as much as possible in a relaxed manner. Thus the Easton and Hess questionnaire was administered on the front porch of Ronald's home and was interrupted by neighborhood friends and a spider. What might have been lost by way of attention to a few items was more than compensated for, as on various other occasions, by the encouragement given to the boys' spontaneous reactions to the material. On this particular occasion the boys even discussed each other's responses to some of the items as they went along. However, we kept a record of the conversation and any switching of answers and in this way learned something about the timing and the stability of the two children's responses. Bearing in mind the classic dictum that you cannot measure anything without changing it, we felt that we were affecting most the children's specific information and the range of phenomena on which their concepts came to bear, and least their underlying styles. The same observation has already been made about the effect of our teaching.

Actually, we wish we had observed the children under still more circumstances, for example, in their play with other children on the playground. That we did not must be laid to lack of time or, more often, our not anticipating that we should look in a certain direction until it was too late to get the data.

We interviewed the parents of the children in their homes, trying especially to get at the ways the parents governed the children, their expectations for them, their perception of the children's performance in school and the children's relationships to other children, particularly siblings, the parents' views of the children's pre-school development, and the parents' views of their children's schools themselves. From the parents' manner with us, their way of talking about their children, from the children's own manner and what they said about their parents, and from a few glimpses of the parents with the children, we attempted to make inferences about how they talked and behaved with one another.

At the close of the school year we interviewed the children's regular 6th grade teacher, with whom we had had only the most casual contacts during the period of instruction (when he was not present in the classroom). We also consulted the children's cummulative records at the end of the school year. These included the results of California Achievement Tests administered at the same time as our experiment, as well as the results of previously administered achievement and intelligence tests and the grades and sparse comments of past teachers. Thus it was only toward the end of our acquaintance with the boys that we got the official word on their academic accomplishments and potential.

In our writeups of Ronald and Keith we will be comparing the two boys quite frequently, and sometimes referring to other children in the study. This reflects the fact that we were comparing our subjects with one another throughout the investigation, our intention to focus on individual cases notwithstanding. Again, this argues for a procedure that works back and forth systematically between studies of groups and of individuals. The present study is only the first stage of the projected research.

The Two Case Writeups.

In presenting each case we will first analyze the subjects' thinking on a single item from the law study, the Lumberyard Case, discussed with the children at the end of the second week of instruction. We will next enlarge our picture of the subjects' conception of law and society, drawing on our data from both the instruction and the auxilliary inventories, and then go on to discuss the general style of their thinking. Finally, we will relate the children's thinking to what we know of their family and school history.

The Lumberyard interview with which each case begins is, in a way, the most important part of each case writeup. We now feel that every nuance of an interview with a child is significant, and tells us or reflects something about him, as much as it may also reflect something about the interviewer. This is one of the main points to be made in this report, and much of the material in each case is presented to back up or amplify the analysis of the Lumberyard interviews. Other performances of the children could have been focused on instead, but the Lumberyard interviews have been selected as the clearest and most detailed examples.

CHAPTER II

Ronald

The Lumberyard Case.

1. T.-- The Hollowdale Lumberyard is surrounded by a high fence. And the gate was usually locked when no trucks were going in or out. However Kent and Renny hadn't had much trouble getting into the yard one day about a month ago, because they had found a large shutter leaning against a fence, that made a perfect ladder. They'd always wanted to explore the long rows of boards that were stacked higher than the fence top. This day they found long tunnels which ran between the boards and were great for hiding, sort of closed off from everything but the sky. As Kent ducked away from Renny and ran down one long aisle, he looked up at the sky overhead and thought what a fine place they had discovered and how he would have to bring his friends back and show them this place. Just then he saw a large board hurtling down on him from above. He tried to dodge it but he couldn't. It hit him on the back and pinned him to the ground. Two workmen who had been stacking wood had accidentally thrown one piece over the pile. They heard Kent cry, but couldn't see him at first. By the time they arrived, he had passed out. Renny was so scared he ran off. Kent was badly hurt and had to spend a long time in the hospital. His Dad was sitting by his bedside in the Children's Ward, wondering what he could do about all the bills that were piling up. What do you think he could do?

2. M.-- I think he should sue the men who threw it over. Since they accidentally threw it over, I think it would be the boss's fault.

3. T.-- Why?

4. M.-- Because the boss is the guy who's responsible for everything that goes wrong and he has to pay the bills or something like that. If something happens to somebody who's around the property.

5. T.-- You think they should try and sue them. Who would he sue in this case?

6. M.-- Kent's father would sue the owner.

7. T.-- Okay, I'm sure you're right. Now when it gets into court what do you think the arguments would be on the two sides? What would Kent's lawyer say and what would the lumberyard say?

8. M.-- The lumberyard would say that Kent had no business being on the property. The other lawyer might say that there wasn't no sign saying he couldn't go in. The other lawyer might say that it was locked and that was a good enough sign for him not to go in there. And Kent's father might say that it is a boy's nature to be hardheaded and go exploring things.

9. t.-- What else?

10. M.-- Kent's lawyer could say that it wasn't his fault cause he didn't know the men were working over there. Usually if they were working real near by he would have been more careful.

11. T.-- Now suppose that the lumberyard's lawyer says that, well, we did put that high fence around there to keep the kids out and so they should have just stayed out.

12. M.-- Kent's lawyer could say, well, they found something like a ladder that is, well, exactly like telling them to come in. "Here's a way for you to get in." And like they always say, boys will be boys.

13. T.-- What would each side have to prove? Can you think of something that they would try to prove in court, 'cause they do try to prove facts.

14. M.-- They would try to prove which side was wrong and see that the fair side was right.

15. T.-- Would there be any facts they'd have to prove?

16. M.-- Yes.

17. T.-- Like what?

18. M.-- Kent's side would have to prove that he was just playing around and not trying to steal anything and him and his friend have evidence, he would be a witness. He could tell them why they were in there and why they picked that place to play.

19. T.-- Is this like any other case we've talked about?

20. M.-- No.

21. T.-- I think it is, so let's try again. Of the different cases we've talked about which do you think it would be most like?

22. M.-- It's like the one where the boy got hit in the head with a golf ball.

23. T.-- Why is it like that?

24. M.-- Because in this case they weren't supposed to be in there and there was some Italian boy who went in there. Both boys went over a fence or through it, that they weren't supposed to, and both times one of the boys gets hurt.

25. T.-- Is it like it in principle?

26. M.-- No.

27. T.-- How did the case of the golf course finally get decided?

28. M.-- The two lawyers were justtalking to each other and wouldn't raise their voices, and they found a solution and the person who lost the case he'd have to pay.

29. T.-- In the golf course case who lost, do you remember?

30. M.-- The golfers.

31. T.-- What was the argument that was given? What was the principle? After all, the boys were trespassing.

32. M.-- Yeh. The lawyer said that those holes should have been patched up and that the rangers weren't doing a good job and some people said that they hadn't seen the rangers doing their job. He could have said that if he could get [illegible] rangers for about two weeks, if all the kids were thrown out, if he could get better rangers, then he would have to pay. If they made that agreement he'll have to hire some good rangers that he knew he could trust and if he won the other guy would have to pay.

33. T.-- They should have a little kind of contest, is that it? And agree to get guards for a couple of weeks?

34. M.-- If the rangers did a better job, then the other ones, then the golf course would have to pay.

35. T.-- Oh, I see how that works, yeh. Now the judge told the jury in that case of the golf course that a property owner had a certain obligation. What's that obligation?

36. M.-- If some man came trespassing and dug a hole and it was dark and he was sneaking up here and fell in the hole, it wouldn't be my fault. It would be his for sneaking over without calling me, especially if I had a sign that said to be careful of the big hole. But if he came up onto my porch to give me some magazines or something and I wanted him to come and he fell through the porch, then it would be my fault because I invited him up.

37. T.-- You earlier made an interesting comment about the shutter. Remember how you said that? That shutter was just standing there like a ladder and it was almost saying something to the boys. What was it saying?

38. M.-- "Come on in and have fun, and bring the others. And if you have fun tell other kids not to tell on us."

39. T.-- If that's what that shutter means could that have a relationship to this general idea about inviting, being responsible if you invited somebody?

40. M.-- Well, no it's a little different, because the men were working over there and Kent was playing hide and seek and he was hiding from his friend, and when he looked up and saw it coming he tried to dodge it and couldn't make it. And it pinned him down, and he started screaming and the men came running round cause they couldn't find him.

41. T.-- Do you remember that case we talked about with the dog and the traps? Oh you were in Mr. C's group and didn't get that. Let me tell you about it a little because it does relate to this. A man in England set traps on his property and he said they were there to catch foxes. They were bigger than he needed to catch foxes and the neighbor's dogs were being trapped in them. And the

traps had meat, very smelly meat, that had poison in them. He put the meat in the trap and the dogs would go around and round and come on to the man's property. Finally, the owner of one of the dogs sued the man with the trap, but the man with the trap said that the dog had been trespassing on his property. And the dog owner said, "No, my dog was lured onto your property because your property had the smelly meat on it."

42. M.-- That was just like inviting him over.

43. T.-- Right. And that was a very important principle, because often when a case comes up now they'll go back and they'll talk about that case. Now in the case of the golf course the lawyers used that case, because the golf course was like a lure to the children, it was like a trap. What could a lawyer say in the Lumberyard Case?

44. M.-- The lawyer on Kent's side could say that the ladder was there to invite and lure the kids over.

45. T.-- And if they could establish that, then how would the case turn out do you think?

46. M.-- Well, I think Kent's side.

47. T.-- Why were they right? They were trespassing you know.

48. M.-- The boys were just exploring, all boys sooner or later like going around climbing trees and jumping over things, going into caves. All they say is, "Oh, boys, come here, boys, look!" They might go into an old shaft mine during vacation. And if anything happened it would be the man's fault whose property it's on, because he didn't board it up. Cause anybody could walk in.

In the first 12 statements (Stmts.) of this interview Ronald makes a fairly breathtaking assault on the problem. While all but one of our 10 subjects consider the possibility of Kent's father's suing, only Ronald comes close to understanding the basis of the suit. He spontaneously connects the board's hitting Kent accidentally with the idea of suing the "boss", thus revealing at least a crude idea of an owner's or employer's liability for injury sustained on his property. He does not get hung up on Kent's trespassing and in fact introduces the idea of children's "nature" (which no other subject in Ronald's class, and only one in the first class seemed to be aware of.) He rapidly constructs two workable arguments in good correspondence to each other. And in response to the fence probe (Stmts. 11-12) he virtually employs the concept of invitation or attractive nuisance.*

In the next part of the interview the examiner is attempting, admittedly with some ineptness, to explore further certain aspects of the subject's capacity for legal reasoning: his disposition to question facts that might be crucial to the argument, his ability to use analogy, and his relating cases to a general principle. First consider the brief exchange on the proving of facts (Stmts. 13-18). Ronald seems at first not to know what aspect of the case "facts" refer to, but then he comes back with quite an important matter of fact to be established. One may still feel as the examiner did at the time that Ronald was not really concerned with the necessity of proving facts in this case. Had he raised a question about how the shutter came to be leaning against the lumberyard fence, or had he asked any questions of fact spontaneously at other times during the interview, as did some of the other subjects, one might conclude that the determination of facts was more important to him in his way of thinking about the case. Ronald seems to assume from the outset, or at least in the way he winds up his initial statement of the two sides of the case, that Kent has the better argument. At the same time, this does not prevent Ronald from seeing that there are indeed two side to the case.

Another clue to Ronald's conception of proof occurs in Stmt. 32. Here he suggests a kind of experiment to settle a question of fact in an earlier case. In the Golfcourse Case there had been a dispute as to whether or not the golfcourse had retained guards to keep children off the property, and no Ronald proposes that plaintiff be allowed to hire guards of his own, to see if they would do a better job than the guards allegedly employed by the golfcourse. Notice, however, that the examiner calls this a "contest." While i bears some resemblance to a kind of evidence introduced into courtroom trial it has also the ring of a more primitive trial or wager. The plaintiff's winning would result in the defendent having to pay, rather than in evidence to be submitted to a court for its decision.

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* The concepts of invitation and attractive nuisance merge or overlap in the court's discussions of children's trespassing (Lyshak v. City of Detroit, 351 Mich. 230; 88 N.W. 2d, 596). Technically, it would be most accurate to label the concept Ronald illustrates in Stmt. 36 "invitation" and the concept illustrated in Stmt. 48 "attractive nuisance." However, the latte can be subsumed under the former and we did not try to distinguish between them in the Lumberyard Case interview.

In Stmt. 19 the examiner in effect asks Ronald for an analogy. (We had not used the term 'analogy' with the children in the instruction, though we probably should have; the word itself is a valuable tool. We had, as the present question calls for, discussed how certain cases resemble one another.) It is significant that Ronald, alone of all the subjects, says flatly "No," the Lumberyard Case is not like any other case. Our inference is not simply that Ronald cannot draw the required analogy, for he goes on a moment later to do so, at least at a level of factual correspondence. What strikes us more is that Ronald does not play the school game. For many children a "yes/no" question at this juncture in a discussion is a signal that the teacher "has something in mind." Ronald does not take the bait, and again he refuses it when another such question (Stmt. 25) is put to him about the principle in the (now) two cases under discussion.

By no means do we mean to imply that Ronald is not cooperative. Rather, he does not use, or perhaps does not even perceive the clues to what the examiner wants here, and, more significant still, he may not be disposed to do the kind of generalizing that the examiner or the teacher expects.

The next thing to notice is Ronald's reply (Stmt. 28) to the question, intended to lead into a discussion of the principles in the Golfcourse Case, as to how the case "finally got decided". Perhaps it could be inferred -- it has only occurred to the examiner at the time of this writing -- that Ronald's response is an attempt to state what he thinks is the principle of the case, viz., lawyers should not raise their voices, etc. At the time of the interview the examiner's feeling, now somewhat mitigated by this last consideration, was that Ronald was replying to the immediate question at an inappropriate level of abstraction. This feeling was set up by Ronald's response to the earlier question about proof of facts, that "they would try to prove which side was wrong and see that the fair side was right." Both responses at issue here seem to be too general, rather than too specific for the occasion. Another angle on these responses is that they refer to the procedure rather than the substance of the resolution of the case. All of our subjects tended to stress procedure more than we anticipated in response to certain questions, for instance, in telling us that they "discussed cases," "had a trial," etc., when we asked them what they had learned or studied about law with us. Only Ronald talked about procedure at this juncture in the Lumberyard Case, which suggests that it is more central to his way of thinking about the case.

In class the first week all of the subjects had written (after class discussion) their own version of a principle of manufacturer's liability. Ronald's statement, that "The maker has to make sure that people won't get hurt when they use it," was not unlike most of the others, but differed from Keith's in the omission of a clause setting "reasonsble" limits to the manufacturer's responsibility. In the second week the principle had been extended to owners and managers of property and complicated with the concepts of invitation and attractive nuisance. The children did not write statements of these ideas, but they discussed them, especially in reference to the Golfcourse Case. Ronald is recorded to have favored the side of the plaintiff in a small group discussion, basing his argument especially on there having been holes in the golfcourse fence, there not being enough guards, and the plaintiff's not being able to read the "No Trespassing" signs. Now in reply to the examiner's question about the judge's charge to the Golfcourse jury, Ronald gives a concrete example of the concept of invitation.

Ronald's example shows that he has some understanding of the necessity of relating a rule or principle to the case. This is suggested especially by the fact that the details of his example do not come from the case in question. However, Ronald's response differs from that of the other subjects in its being more extensive, a full-fledged, almost narrative example, whereas the statements of the other children tended to be specific to the cases, or concrete statements _in the form of_ a generalization, for instance, Keith's saying that a property owner should "keep his fences high enough."

Another way in which Ronald's response differs from that of the other subjects is that in giving an example of invitation, he does not think here in terms of the owner's _general_ responsibility to protect people, but instead illustrates an auxilliary principle, one we had intended or thought we would have to lead into, as we had done previously in asking about the fence in the Lumberyard Case (Stmt. 11). That we expected a statement about a property owner's general obligation is indicated by the wording of the question. Ronald's reply is divergent, but it gets at a more difficult aspect of the problem and suggests a greater potential relatedness of the Golfcourse and Lumberyard cases than all but one of our other subjects had perceived.

In Stmt. 40 Ronald resists applying to the Lumberyard Case the principle of invitation he has just illustrated! In fact, he seems to slide off into a narration that takes over his original response, that is, if he began with something in mind that distinguished between the two cases, he loses it somewhere along the way.

Now the examiner is really puzzled. Ronald has talked about the shutter in the Lumberyard Case in terms that imply the concept of invitation, yet he rejects the examiner's labeling the case this way. Does Ronald resist generalizing altogether? Perhaps the problem is that the actual term "invitation" connotes to him an intentional, overt gesture toward someone, whereas his interpretation of the Lumberyard Case is more subtle (and, though he does not realize it, more powerful). The examiner therefore tells him about a case that we had incorrectly supposed Ronald knew about from a class discussion. At a critical point in the telling, Ronald interjects, "That was just like inviting him over." He then procedes, after prompting, to apply the term to the Lumberyard Case, and when the examiner doublechecks to make sure he understands the application, he invents a lovely new example. Still, he does not try to relate the term 'invitation' explicitly to his own new case and he does not state the principle he is using in a generalized form.

One last thing must be noticed in this interview. Both in discussing the shutter's invitation to the boys and in talking about boys' exploring Ronald projects himself into the situation to a point where he actually speaks another's part. "Oh boys, come here boys, look!" Of our 10 subjects only Ronald engaged in this role playing in diagnosing the Lumberyard Case.

Let us summarize the characteristics of Ronald's thinking that seem to be reflected in this brief sample. He thinks fluently. To say he thinks "concretely" might be somewhat misleading, for while he enters into situations narratively at times, he has a certain conceptual looseness or flexibility that enables him to see different sides of a case and to apply new concepts to it. At the same time, though he can generalize between cases he seems to prefer not to, and even when he is led to make a generalization he does not state it in abstract form.

There is a kind of funniness about Ronald's discourse with us. His responses are often different from what we expect, not simply in the sense of "right" or "wrong", but in the light of the cues we think we have given him. Partly, Ronald does not seem to be trying to complete or match the examiner's thoughts in the ways that are conventionally recognized in school. Sometimes, he seems to lack a sense of the appropriate level of abstraction at which to respond to a question and occasionally to lack control over the direction or relevance of his thinking. Not the least reason for his unpredictability, Ronald is highly inventive, producing details of a given case and making up new cases to illustrate his points.

Though there is only a hint of this in the Lumberyard Case interview, we will assert that Ronald is less concerned with establishing the truth of a proposition, whether fact or generalization, than in constructing an argument or a story with ideas he takes as given. Similarly, he rejects ideas as much because they do not seem to fit his constructions of the moment as because they do not accord with even his own knowledge of things. Ronald reacts with feeling, empathizing with someone in a situation that is described to him. He is quick to judge, but still he is not moralistic, that is, he takes account of circumstances in forming his opinion. In fact Ronald seems to have a certain quality of moral maturity which is reflected in his relatively sophisticated ideas of the responsibilities of the various parties in the Lumberyard Case. Finally, the interview may contain a couple of hints of a particular concern Ronald has with the procedure of resolving a dispute or conflict.

In the remainder of our discussion of Ronald we will qualify and enlarge upon these observations. The reader must be advised, however, that at the time of the Lumberyard interview we were not in the position we are now to understand Ronald's or the other children's responses. In the interview, and even more in class at that time, Ronald's thinking seemed tantalizing but strange. Only in the light of all our encounters with him does any one performance make sense.

Ronald's concepts of law and society.

A central thread in the ideas Ronald brings to bear on and develop through the law material is his constant resort to practical, peaceful means to settle disputes. There were two ideas of this sort in the interview analyzed above, the experiment of hiring guards already noted and the observation that the lawyers in the Golfcourse Case would have talked "without raising their voices" and thus found a solution. The first of these ideas, like others scattered throughout Ronald's record, has the flavor of both convention and invention. Another example of this would be his suggestion in response to our Original Interview question about what to do if some of the children stranded on an island together would not obey the rules of the gouup: "Split up the group and let people do things their own way, then try to help those who were in trouble." In response to the First Problem item about two countries in conflict over land because a river boundary had gradually shifted, Ronald remarked, "Gee, I see their problem!" and then proposed that the land be returned to the country first controlling it and that money be given to the second country to make up for the loss of their buildings and so forth on the land. When asked if there was anybody that both countries could go to to help solve their problem, Ronald replied, "Well, if there was some king and they went to him, he might cheat them, but if he was a fair king he might work out a way for them both to be satisfied." If this failed, there might be a war and the winner would take all the land.

At the outset of our experiment if not at the end, Ronald, in common with most of our subjects, thought of the law mainly in terms of something that happens to or restrains wrongdoers, rather than as a resort for the injured parties themselves (beyond calling the police) or an institution to protect one's possible innocence. Thus in response to a problem involving a complaint about motorcyclists making noise, he suggested that the cyclists be arrested for disturbing the peace, but he did not see the relevance of the law or the court if the cyclists felt they were within their rights. The first week in class he proposed that a painter who had injured his back when his employer's scaffolding collapsed under him should thereafter just paint at ground level, or, that failing, get another job. He did not suggest any way, except mere asking for it, that the painter could get his medical bills paid by his employer. In the Last Problem, involving a boy who had been badly injured by another, he did suggest suing for damages after we asked him a leading question, but his first response was to observe that the boys should have had a contest instead of fighting (the primitive trial idea again) and then that the family of the injured boy would want to have the other put in reform school. That Ronald thought immediately of suing in the Lumberyard Case may have been partly a function of the instructional context at that time, whereas at the end of the children's study they were focused not on suits as such but on appeal grounds and procedures. On the other hand, all of the other subjects in Ronald's class thought at once of suing in the Last Problem.

Ronald's not readily turning to the law and courts to solve certain problems may have involved a special twist for him individually, viz., the belief that law complicates things for men, who would be better able to conduct their affairs without law. On the Law Attitude Inventory, only Ronald responded negatively to the statement "If people could not take their problems to court, it would be much harder to get the problems settled", and only he responded positively to the related item, "Business would be much easier to run if there were no laws telling businessmen how they should do things". This squared with Ronald's feeling in a class discussion several weeks later that anyone should be able to understand a written contract, for if one has signed it he knows what he has signed. In the Lawyer Dialogue, toward the end of our instruction, Ronald replied to the card stating that lawyers make trouble for people that his lawyer (he had slipped into the role of the client) was trying to help him -- a weak response compared to a few others that commented on the chaos that would result from not having some system of law to resolve disputes.

On the Easton and Hess questionnaire Ronald checked only the car item among the following to indicate what he thought was a law: (a) brush your teeth, (b) don't cheat in school, (c) cars must stop at stop signs, (d) get to school on time, and (e) always vote. How Easton and Hess's subjects responded to this has not yet been revealed, but Keith checked (b), (c), and (d), a difference between the two children that seems significant to us in terms of their respective ideas of law. (Of course, Ronald was correct in not checking (a), (b), and (e); the simplest point to be made is that he does not see the domain of law as being as wide as Keith sees it.) In response to our own question on the First Multiple Choice Test, "Who can make a law?", Ronald checked only "a state" among the following alternatives: (a) a state, (b) the church, (c) a school, (d) a city, (e) a factory, and (f) the family. Keith, by contrast checked all of these. Again, when we asked the children outright in the Original Interview, "What is a law?", Ronald said it was "something written out that helps prevent bad things from happening and protects people", while Keith said it was "something that the people of the state, the country, or whatever they live in, should obey". Keith's explicit definition seems to restrict law to the conventional political jurisdictions. However, the concept "obey", which we will notice later is particularly central to Keith's outlook, opens the gate to the larger domain indicated in his multiple choice responses. It will be shown that Keith is not generally, or stylistically, prone to overgeneralizing. Ronald, on the other hand, *is* prone to undergeneralizing. His more restricted conception of law thus seems to be a function of two factors, substantive and stylistic respectively, his problem orientation and his undergeneralizing.

On the Easton and Hess questionnaire again, Ronald checked that people who break laws *always* get caught (cf. Keith's *usually* get caught), and he responded YES (cf. Keith's yes) to the statement, "All laws are fair". Similarly, in the Kohlberg interview Ronald said he could not think of any bad laws (in this Keith agreed with him, as we would expect). From all this we conclude that Ronald does not have a cynical or soured view of law, as one interpretation of his Law Attitude Inventory responses might suggest, but rather that he just does not relate law to most areas of life.

Perhaps the conviction that men could handle their problems better without the law and lawyers is consistent with Ronald's ingenuity and persistence in suggesting that people get together and settle things themselves. However, Ronald also tends to oversimplify problems and their solutions and in the process to slight rights or feelings that he himself recognizes to be important. This trait he shares to a greater or lesser degree with all of our subjects, and we should actually turn the statement around and observe that Ronald has somewhat more appreciation of the complexity of human affairs than most of our subjects. The key may lie in a distinction between understanding the motives and actions of individuals, in which Ronald seems to excell, and comprehension or awareness of complex social systems or institutions, in which he appears to be more normal for his age or grade in school. (Even this latter "normalcy" has Ronald's special stamp on it, as we shall try to show.) We can get bearings on this by examining Ronald's performance in a variety of inventories.

In the Original Interview Ronald differentiated correctly between the roles of the police, the lawyer, the judge, and the jury, saying for instance that "a lawyer would help me on my side" and that "a judge sentences wrongdoers and lets the people (the jury) decide if a person is guilty or not". Ronald evidenced more knowledge of these roles than most, though not all of our subjects. However, in the Lawyer Dialogue Ronald, almost alone of all the children, distinguished consistently between ideal and actual behavior of lawyers and judges, as, for example, in the following interchange:

Ronald: ...the judge would try to get the people on Mr. Smith's side, if he's that kind of judge.

Ex: What other kind of judge could there be?

Ronald: A fair judge wouldn't try and help Mr. Smith's lawyer win.

Of course, almost any subject could be brought to say this sort of thing with sufficient prompting. The wording of Ronald's statement, particularly the "if," spontaneously implies the recognition of both real and ideal, or real and norm. All but one of our other 9 subjects tended to speak of only one alternative at a time: the judge's being the friend of a lawyer won't make a difference in court because judges are supposed to be fair, or the judge's being a friend means that the trial will be fixed. The reader will have already noticed that Ronald's remark about a "fair" king (p. 29) was also conditional. Kohlberg (1958) finds that the capacity to recognize simultaneously role norms and deviant performances is one of the distinguishing characteristics of the moral judgment at Level III, Kohlberg's highest level. Ronald in fact, as we will note further below, scored highest of all but one of our subjects on the Kohlberg Moral Dilemmas, and his protocol includes a couple of examples of recognizing role deviance.

One must account for the fact that in response to the Easton and Hess item, "think of the Policeman as he really is," Ronald checked "Is friendlier than almost anyone," and "Would always want to help me if I needed it," and yet the one real encounter with a policeman that Ronald told us about had quite a different quality. Here is an abbreviated version of Ronald's "true story":

> We were on our way to Middletown and we were speeding on the highway and a policeman stopped us. He took us all the way to the station. We paid a fine and they kept us there a long time. Then we had to find the road and the police wouldn't even help us. We were far behind where we were supposed to be and we had to sleep by the road.

Ronald's responses to the Easton and Hess policeman and president items are almost identical, corresponding to the undifferentiated, fairly benevolent image that Easton and Hess report is standard for children of Ronald's age. The Easton and Hess items on officials, however, addressed as they are to "the Policeman" and "the President", may well elicit children's, or for that matter adults' concepts of the roles more than the actual performances of the role occupants. What does "really" mean when the question is about the policeman? To check that the policeman is "friendlier than just a few people" does not solve the problem of how you indicate role deviance. Ronald's solution is to check according to the role, but, on a different occasion, to tell us according to his experience. On this latter occasion we actually gave Ronald the option of telling us a true story or making one up, and Ronald elected the first. We will see later how differently Keith handled the Easton and Hess questionnaire and the story.

A behavior related to Ronald's recognizing role deviance in the law material is his playing roles of others, or, more simply recognizing or imagining feelings in others. This was quite prominent in the Lumberyard interview and in Ronald's response to other law material. Ronald voluntarily expressed the feelings of one or another person in all four of the Kohlberg dilemmas, a marked contrast to the behavior of all our other subjects, who volunteered virtually no feeling of others. Here are some of Ronald's spontaneous remarks:

> "It would be worse for a father to break a promise to his son because the son would really be expecting it, would really plan to go and the father wouldn't take it as hard."
>
> "If the other guy trusts him then he'll feel guilty."
>
> "He (the salesman) was stingy and selfish . . . and he would have felt bad if the lady died..."
>
> "He should leave, because after the bombing if his family had been killed the man who was there would be responsible and would feel bad...."

Is Ronald merely projecting his own feelings into others? Kohlberg (1958), in discussing George Herbert Mead, stresses Mead's view that a person develops his concept of self by learning the role expectations that others have toward him. This leads Kohlberg to the idea that the development of moral judgment depends partly on this learning of roles. Ronald's higher performance on the Moral Dilemmas and his responses to the law material seem to reflect this learning, plus a kind of looseness that allows Ronald to put his empathy to use in talking about people.

When the children listened to a recorded dramatization of an Eskimo song duel, a few days after the mock trial, it was Ronald who perceived that the villagers ended the duel by joining in the song of one of the contestants. Here Ronald was demonstrating some capacity for understanding a complex social process. However, it was not Ronald but another child who went on to draw the analogy to the jury in our system. In the Lawyer Dialogue Ronald demonstrated some comprehension of the truth finding function of cross-examination in a trial, but in a later conversation he attributed to personal meanness the attack of one of the mock trial lawyers on a witness. When our instruction began Ronald knew nothing of the possibility or process of appeal in the courts, but after we had introduced it he used the concept on various occasions, even commenting spontaneously during the pendulum tutorial that he had "learned about appeals and that a man is innocent until proven guilty" in class with us. An example of Ronald's using the concept is his saying, in response to the Lawyer Dialogue statement that Smith's lawyer thought his client might lose the verdict, "It's time to begin preparing an appeal." However, when the last statement in the dialogue indicated that Smith's lawyer thought his client had not had a fair trial, Ronald said, "Maybe that's because his client lost and he tried hard to make his client win. A person like that is a spoiled brat." Only when we asked if there was anything further that Smith's lawyer could do, did Ronald say, "He could take it to a higher court." The "spoiled brat" comment could be taken as a realistic interpretation of the lawyer's feeling, in line with Ronald's other remarks about role occupants. We are also inclined to see it as a falling back on the primitive contest idea, that is, as an expression of sentiment more appropriate to a game than a court trial. To be sure, a trial is like a game in certain respects, especially in the adversary system of our own courts, and Ronald's comment may be realistic from this standpoint too (Huizinga, 1950). Unfortunately, though one day subsequent to the Lawyer Dialogue we had the children compare a trial to a baseball game, we do not have a record of our subjects' individual thinking on this.

Ronald's thinking about sanctions in various contexts reflects his general fluency and his savy about people, together with his just beginning to understand the working of complex institutions and, what we think is related, his indisposition to think in terms of systematic abstract categories. When he was asked in the Original Interview how the children stranded on an island would deal with an older boy who was picking on younger ones, Ronald said they would get mad at the older boy, jump on him, and put him out of the group. When asked what would happen if a leader neglected to enforce the laws, Ronald said people would disobey him, and would take over and do things their own way. In the class's discussion of the mock trial case, Ronald argued that the defendent's furniture store should be allowed to keep the goods it reclaimed, despite plaintiff's misfortune, because people otherwise would not honor their contracts (a high level response in the Kohlberg scheme and more generalized than usual for Ronald). In the Last Problem interview Ronald showed that he knew the court could compel a reluctant defendant or witness to attend, but when he was asked a related, more general question, why people resort to the courts when they are not always sure they will win, he replied, "They try you know, like they say if at first you don't succeed, then try, try again."

The following is a discussion with Ronald of a generalization about sanctions recorded two months after the instruction:

Ex:-- What do you think this idea means? "Without ways of making people obey the laws, men could not have justice."

Ron-- Without electric chairs, guns, tear gas, the police couldn't do anything. Everybody would do what they want, policemen would have only nightsticks and people would jump them... The whole police force couldn't do anything because they don't have weapons to make people do justice.

Ex:-- How does the idea apply to how the courts work?

Ron-- They make you have a fingerprint if they suspect you.

Ex:-- Does it apply to the Eskimo song duel we listened to?

Ron-- No, there's a little difference there. They didn't look at the facts, if the rhyme sounded good, then that man won.

Ex:-- What happened at the end?

Ron-- Kakachik left, everybody was laughing at him and singing against him. So he went to find some other spot to live and he took his one wife. Usually someone dies when he leaves the tribe, so they probably died in the winter.

Ex:-- Doesn't that apply to the idea that there must be ways of making people obey the laws to have justice?

Ron-- Oh yes, it does apply now! The force of their singing against him made him leave.

The "Oh yes" at the end sounded to us like a real "aha", even though the examiner was pulling for it. At the same time, Ronald's thinking about sanctions is not systematic, that is, while he enumerates different weapons of the police and at another point makes the connection to singing against someone, he does not think (as we did in class) in terms like ways of enforcing conformity in everyday affairs, ways of compelling people to attend the courts, ways to enforce court decisions, and so on. We will not say that Ronald could not learn to think in these terms, but in the next section of this writeup we will comment on several factors that make a difference in his learning.

A detail of the interview that we notice is Ronald's distinguishing between the rhyming contest and getting the facts, which we take to be an advance in his conceptualization of trials.

Ronald's performance on the Second Multiple Choice Test adds to our picture of his thinking about complex social institutions. Each of the 8 items on this test presented a question and three possible answers, all of which were represented to the children as being correct. The children were asked to rank the three answers to each question in order of relative weight or importance or significance. In fact, the choice between a first or second answer was particularly hard to make for many of the items, and we decided later that even our own choices here had been somewhat arbitrary. However, we (the project staff) were quite agreed on which of the three answers to any question was least satisfactory or least significant, and thus a subject's score on this test was determined by the number of these third alternatives that he chose for a first or second answer. Keith, alone of all our subjects, included none of these third alternatives in his first and second choices. Ronald included 6 of the 8 in his first or second choices, twice the number of the next highest (or next most discrepant) performance on this test. Notice, for example, Ronald's choices on the following two items, (our own choices are given in parentheses after the alternatives:)

1. It is harder to prove somebody guilty in a criminal trial today than it was 500 years ago. Why is this so?

   __2__ Criminals are smarter than they used to be. (3)

   __3__ An accused person has more rights and more protection than he used to have. (1)

   __1__ Lawyers have more ways to defend someone than they used to have. (2)

8. Eskimos do not have courts like ours. Why is this so?

1	The Eskimos do not have any lawyers.	(3)
2	Their life is simpler and they do not have as many problems.	(1)
3	The people in an Eskimo village all know each other and so they can hold their own trials.	(2)

What seems to be operating here can be expressed in several ways. Ronald lacks a sense of the priorities or the hierarchical relationships among the answers, or he does not have a grasp of the major causal relationships involved, or he thinks more in terms of the persons and roles involved than in terms of the more impersonal processes or relationships.

Our claim that Ronald's comprehension of complex social processes or institutions is more limited than his understanding of individuals and personal roles rests as much on our knowledge of his thinking about politics and current events as his thinking about the courts and the law per se. Ronald knew that Congress, not the President, makes laws, but he knew absolutely nothing of the roles, even of the existence of the Republican and Democratic parties when we administered the Easton and Hess questionnaire to him. When we attempted to explain the parties, he quickly associated them with the distribution of leaflets and the blaring of sound trucks in his neighborhood, but he also connected the parties with what he literally understood to be a pitched battle with weapons, an interpretation which he inferred from having heard on television (and remembered all these years!) that Nixon was "cut down" by Kennedy. Interestingly, neither Ronald nor Keith recalled the more recent Johnson-Goldwater contest as well as they did the Kennedy-Nixon contest, indeed neither knew Goldwater's name. Ronal also professed to be totally ignorant of the meaning of the term 'democracy', and when we told him some people thought the U.S. was a democracy and Russia was not, he guessed that democracy meant "stronger".

From our limited efforts in this direction, we realized that it would require a few hours to teach Ronald at least a rudimentary understanding of the political parties and of democracy. Perhaps the reader is appalled by this cavalier estimate (what is a "few" hours and what is "rudimentary?") but we mean to imply that part of the situation is not so much lack of capacity or disposition (which we will consider later) but the absence of any effort by anyone previously to teach Ronald these things. Ronald said, and we believe, that there had been no instruction of this sort in school. Also there seems to be little or no discussion of politics with Ronald at home, despite his generally honorific response to an Easton and Hess item that his parents were "usually interested" in current events and what happens in the governmnet.

In response to the Easton and Hess question asking which children would be picked as "the best citizens" Ronald chose "A boy who helps others" and "A boy who goes to church," thus omitting "A boy who is interested in how our country is run." At the same time, he checked all but (d) of the following items as being at least "more important than many problems" in America today: (a) curing sickness, (b) Communist Russia, (c) making our cities beautiful, (d) people out of work, and (e) making sure all Americans have equal rights. Hess reports that most sixth graders include the boy who is interested among their two choices for best citizen, though most fourth graders and younger children do not, and that sixth graders typically rate [four] problems as at least "more important than many" in America today. Keith, we shall notice, chose "A boy who is interested..." and "A boy who goes to church" for his two best citizens, and at the same time rated only (e) of the five items at the "more important than many problems" level. Ronald's responses are, we think, consistent with our picture of him as being concerned with problems and at the same time not seeing how the government or law relates to them.

The reader may be startled that Ronald, a Negro who lives in the inner-city and attends a de facto segregated school, rated "people out of work" as being only "more important than a few problems." (Indeed, Keith checked this one as simply "not a very important problem," the lowest of the possible responses.) We can relate this to the fact that Ronald's father and mother are both employed, the father as a semi-skilled garage attendant and the mother as a saleswoman in a neighborhood shoe "seconds" store. Equally significant, no doubt, Ronald's father owns the two story frame house in which the family lives on the second floor, renting the first floor to an aunt. Ronald told us that the house would someday be torn down in an urban "renewal" project now underway in adjacent neighborhoods, but he said he had no idea of how this would affect his family and he expressed no feeling about it.

In the Original Interview Ronald told us that the purpose of laws was "to protect people, to help people get better jobs without getting hurt, and to prevent fires." We did not follow up the job idea in this interview, and now it seems to contradict, at least in spirit, Ronald's placing a low priority on unemployment. We will guess that he has heard and perhaps talked about specific cases of job discrimination, but, again, that he has not connected it (and second class education etc.) with the general problem of unemployment. This is the sort of clinical hunch that seems to arise as often when it is too late to investigate as earlier, that turns out sometimes, if not often, to be wrong, and that one feels none the less obliged to record.

We tried to discuss with Ronald the Negro rioting in northern cities, and he told us his family had been in Cleveland at the time of the rioting there. (On the same trip to Middletown mentioned before the car broke down and the family stopped in Cleveland for one night.) Ronald said he did not see the rioting, but that his brother had "bumped into a drunken man on the way to the bathroom" whom they had supposed to be one of the rioters.

Ex:-- Why was there rioting in Cleveland?
Ron-- Because men got drunk on a lot of beer and whiskey.

Ronald does not connect the rioting with unemployment, poor housing, or other systematic causes of Negroes' discontent. If he has discussed the riots at all with his parents, we might speculate that they too have condemmed or dismissed them as due to drunkenness or misbehavior. Ronald's father is a lay Baptist preacher. He is not active in the Civil Rights movement, We think, though we cannot be sure, that Ronald has been frank with us about his beliefs and feelings, as, for instance, on a day when we asked what difference it would make if a jury was all white and the defendent was Negro. "That man is black, and black is bad," Ronald exclaimed, once again assuming the role of another. He is aware of whites' bad feelings toward Negroes, and in this case he has connected these feelings with an unfair trial. Once more, however, we must guess that Ronald does not grasp the larger patterns of discrimination.

Ronald's discussion with us of the war in Vietnam is worth reproducing here because it reveals in quite a different context a number of the features of his thinking that one finds in Ronald's discussion of law. The interview has been reconstructed from notes, so the wording is not exact.

Ex:-- Ronald, what's going on in Vietnam?

Ron-- They're fighting like they always do with handgrenades, tanks, jeeps, planting mines [other weapons enumerated.] Between the Americans and the people from Vietnam, it's every man for himself.

Ex:-- What do you mean?

Ron-- If an American finds a man from Vietnam and takes him prisoner, if the man tries to escape, there's no second chance, you shoot him.

Ex:-- What do you think the war means to the people in it?

Ron-- Victory, retreat, success or failure.

Ex:-- Think of the people in the war.

Ron-- Well, there are Japs, Germans, Americans, Vietnams.

Ex:-- Suppose you were a reporter, what would you tell about how people see the war?

Ron-- I'd tell how the war started, how they thought they had a good plan.

Ex:-- What about the people who are not soldiers?

Ron-- They'd tell how bombs missed their target and destroyed the crops, and killed the livestock, how the land was destroyed and they were out working in the fields.

Ex:-- What would they think about this?

Ron-- It's rotten and nasty!, after we were working so hard for men to come and destroy what we produced.

Ex:-- How do you think the war will end?

Ron-- Someone will win the war and take over, then try to conquer the world. They'll take over the next country and then the next and the next. They'll make people work as slaves and won't let you pray to God at night.

Ex:-- Is that so, no matter who wins?

Ron-- If Vietnam wins, they'll take over the United States, they're so greedy. But they can't destroy China, China has more people than the whole United States and Alaska, Europe, Australia put together. China could take over the whole world.

Ex:-- How do you suppose the war in Vietnam can be brought to an end?

Ron-- They'll stop it and shake hands and be friends. Solve their problems.

Ex:-- Will this be hard to do?

Ron-- Yes, all those men that were killed or captured, men wouldn't want to give up that easy, and they had all that training how to fight.

Ex:-- What do you think is really going to happen?

Ron-- The United States might win, they won lots of wars before, or they might lose too.

Ex:-- Do you talk about the war much with people?

Ron-- No, sometimes we play war -- we get guns, hiding places, firecrackers for mines ... [a long account of the war play was not recorded.]

Ex:-- Do you learn about the war from television?

Ron-- Yes, mostly I watch Gallant, Combat, shows like that. I read about wars in history books.

Ex:-- You said people would have to solve problems to end the war in Vietnam. Can you give an example?

Ron-- They'd put down their guns, they might divide the land up evenly, might say two space ships can't land at the same time. They could paint the moon to show whose land it was and they could get cars up there. They'll put a sign on the moon so if anyone lands he'll know he's trespassing and will go away. They'll have a rule, no one can claim more land than he can use.

In this interview we see clearly Ronald's sense of people's feelings and motives, his naivete about complex institutions like those involved in settling a war, his instinct to solve a problem, the oversimplified solution, and his mixture of information and misinformation, or his mixture of information pertaining to different contexts. We see also the examiner's difficulty in cueing Ronald into a given level of abstraction, Ronald's discursiveness, and a certain confusion of reality and fantasy. Finally, Ronald gets onto concrete jags, like his description of the war play, but he also shows an awareness of alternatives ("Victory, retreat, success or failure," "The United States might win, ... or they might lose too,") which indicates a kind of looseness that one does not associate with pathologically concrete thought (Goldstein and Scheerer, 1941) and which in fact seemed more developed or less inhibited in Ronald than it was in our other subjects.

The style and development of Ronald's thinking.

1. Categorizing. Ronald scored 99 [MA 12/4, CA 12/5] on the Stanford-Binet Intelligence Test. Though the test was not administered to our subjects until near the end of the instruction, it was done by a member of our team who had had little contact with the children up to that time. The examiner commented on Ronald's performance,

> Dutiful -- a little passive -- good memory, accurate for numerals, not quite as aware of details visually. Good grasp of word meanings, adequate recognition of the absurd; little ability to categorize or deal with abstractions.

We will want to consider later the significance of Ronald's "dutifulness" or passivity; his seeming inability to categorize or deal with abstractions is the first thing to bring into focus. Ronald, age 12 years and 5 months at the time of examination, failed all of the similarities items at Year XI of the Stanford-Binet, saying, for instance, that "A snake is a long animal like a rope and a cow has two horns like a devil," in response to the item asking how a snake, a cow, and a sparrow are alike. Related to this is his performance on the Society Cards exercise, where one type of question asked the children to remove a card from each of various sets of four cards and tell how the others belonged together. In each case Ronald selected a card that he thought was itself wrong in some way, disregarding relationships among the cards. Ronald's and Keith's responses to 3 of the 6 sets can be compared here to notice the mode of their grouping. (The reader does not need to know the content of all the pictures to make this comparison.)

4. Ron: "V (money), if you don't have money you can get a job."
   Keith: "P (hunting elk for food,) factories, money, and school are not like hunting."
5. Ron: "P (hunting elk for food,) when you hunt yousshould use a dog to help."
   Keith: "E (hunting ducks for recreation,) this is sport, the others are about food."
6. Ron: "U (no weapons in houses,) people should keep weapons for their houses -- there may be an invasion from other planets."
   Keith: "U, the others are all about government.

One may ask what difference it would make in Ronald's performance if he were told very explicitly, "You get points for statements of the form, 'These belong together because they are all X!' This is virtually what we did with the Abstract Categorizing Test, on which Ronald's score of 54 ($\bar{X}$=90, range of the 10 subjects = 17 to 154) was lower than all but 2 subjects. The test asked that the subject find "as many relationships as possible" within each of three lists of 10 words each (in fact, only category relationships were scored,), and the second list was prefaced by an example of how the words in the first list might have been related. The sequence of Ronald's scores on the three lists, 29, 25, 0, indicates that the mere presentation of an example after the first list did not facilitate his categorizing. (The sequence of Keith's scores was 34, 68, 38, yielding a total of 140, the second highest among the 10 subjects.) However, in an interview a week later we explained the first list again and this time encouraged Ronald to "play the game." Ronald then worked out a number of categories of words in the third list; his score on this part of the test alone would have been over 100. From this we hypothesize that Ronald does in fact have the ability to deal with abstract categories, at least to a greater degree than he normally indicates. What he does not seem to have is the disposition or inclination to categorize. It should be noted that Ronald defined correctly all of the abstract words for Year XIII (the same items as Year XI) of the Stanford-Binet, suggesting that he does in fact have a command of abstractions in some sense. What we need is an instrument that would discriminate more precisely than our A.C.T. does between a subject's ability and disposition to categorize. We also need an instrument to assess another, related aspect of thinking that we have noted more than once in relation to Ronald, the subject's control over, or concern for choosing appropriate levels of abstraction in response to questions or cues. We think Ronald's thinking lacks this control much of the time, but we have no more evidence than the sort of discourse that has already been presented.

ii. Generalizations. Ronald's use of generalizations is even harder to characterize than his use of abstract categories. We have noticed that he seems to be reluctant to apply a generalization explicitly to a case which, so to speak, he has already entered into concretely. On the other hand, he is unusually forward about making up new cases to fit a generalization or a principle. In addition to the examples we have noticed in the Lumberyard interview, others can be cited. To illustrate the principle of employer's liability, he invented a marvelously intricate but nonetheless suitable case about a big game hunter's hiring men to catch a lion for him and providing them with a faulty cage. On the same occasion that some leading was required to get Ronald to apply a generalization about sanctions to the Eskimo song duel, we conducted a discussion of another generalization, which must be reproduced here in full:

Ex:-- What do you think of this idea, Ronald? "Whenever one country is stronger than another one, the stronger country will try to dominate the weaker one."

Do you know what 'dominate' means?

Ron-- Yes, to destroy, to wipe out?

Ex:-- No, not necessarily, like. . .

Ron-- To conquer.

Ex:-- Yes, that's one way. But you could dominate Keith or Keith could dominate some other person. You don't have to destroy or conquer a person, but be a big influence on him, control him in certain ways.

So what do you think of this idea, "Whenever . . . the weaker."

Ron-- They'll always pick on the weaker?

Ex:-- Well, I'm asking you -- what you think it means and so on.

Ron-- Well, I think it means the stronger nation always picks on the weaker nation because the stronger nation knows it's the greatest and the smaller nation doesn't have a chance.

Ex:-- Can you think of an example of this?

Ron-- Well, if they were planning to have war and the weaker nation found out about it they would find all the ways to defense, but the stronger nation would probably win the fight and they would put them in chains and make them work.

Ex:-- Uh huh.

Ron-- And then another country would come along and beat that country and...

Ex:-- Can you think of any examples of real countries you know about?

Ron-- Well, at the time Abraham Lincoln was President he said that no man should be a slave. And he stopped the white people from picking on the Negroes and making them slaves.

Ex:-- Uh huh. So you're saying he stopped them from dominating, is that it?

Ron-- He stopped them from ruling.

Ex:-- Do you think this idea is always true, when one country is stronger than another, the stronger will dominate the weaker?

Ron-- Yes.

Ex:-- How does it fit the United States, for example?

Ron-- Well, sometimes the U.S. gets greedy and wants more land and more power, so they might pick on a weaker nation and they might take over that nation and have the people work for them.

Ex:-- Well, can you think of an example?

Ron-- Yes, if the whole United States came into Mexico and conquered it and then after that they got Mexico to fight with them and they went down to Cuba and conquered it, then that would be an example of a stronger nation picking on a weaker one.

Ex:-- That's a pretty good example! I don't know if you know it (the interviewer in fact felt that Ronald did not know this,) but about 100 years ago we did have a war with Mexico and that's how we got California.

Ron-- Oh -- we took it away from them? So that's how it happened!

Perhaps what is most striking in this interview is Ronald's generation of the example of the United States and Mexico, not so much because of the coincidence with historical fact, but because he can so freely imagine the United States committing such an aggression. It will be seen later that Keith at first resisted the application of the generalization about strong and weak nations to the United States; he felt, that is, the United States would not try to dominate other countries. We think there are several factors in the different responses of the two boys to this and many other items or problems. Ronald often, though not always, seemed less concerned than Keith with the truth of an idea, but more inventive or creative in developing it. (This is not meant to imply that Ronald's interpretation of the idea about nations is not true; we will have a different point to make about this.) Ronald also, as we have noticed before, seems to feel freer to recognize or imagine departure from ideal behavior on the part of authorities, and, related to this, his moral judgment (not necessarily his behavior) is more mature than Keith's is. We shall spend some time in developing these points here.

Our intention in presenting several generalizations to Ronald and Keith was not only to test their ability to move from such statements to specific or concrete examples, but also to sound out the children's attitudes toward generalizations. Perhaps it seems strange to be speaking of "attitudes" here. However, we had the feeling in both of the experimental classrooms that most of the children had no spontaneous need or use for generalizations, even though they could be brought to say them or to deal with some of their implications. Piaget, in the last chapter of the Growth of Logical Thinking from Childhood to Adolescence (1958), suggests that there is a dramatic reversal of a child's perception or idea of the relationship between the real and the possible that seems to occur on reaching adolescence. Whereas in childhood, the possible is seen as a function of and limited by the real, in adolescence the real becomes a function of the possible. This, we feel, is one component or indicator of an "attitude" that one might have toward generalizations. A related, and perhaps earlier constructed component has to do with whether or not one holds generalizations to be crucial to explanation, that is, whether one seeks to subsume a specific instance or happening under a generalization in order to explain the specific. Just as we can imagine some, if not many or most individuals not ever experiencing the shift between the real and the possible, we can imagine that some are always less disposed toward generalizations, and correspondingly more disposed to elaborating the concrete or contextual ramifications of things to explain them. This last attitude might well be more characteristic of historians than of economists, or of some historians contrasted with others. It might equally be more characteristic of clinical psychologists than of experimental psychologists. The same variability of human phenomena that we cited at the outset of this paper as a reason for our case study approach makes the more concrete or contextual mode of explanation (and, let us add, justification) a necessary complement to the abstract in social thinking generally, and results in or reinforces both contextual and abstract styles of thinking.

Each time we presented a generalization to Keith and asked him what he thought of it, he spontaneously remarked on its being true, or "not true all the time." Once, when we asked him if a generalization about discontent leading to revolt applied to nations (after he had applied it to individuals) he said, "It ought to," and then proceeded to cast about for an historical example -- a fore-shadowing, at least, of the formal attitude that Piaget refers to, though even Keith rarely stated generalizations spontaneously in discussions with us, in the classroom or out.

Ronald's reaction to the statement, "When people are very discontented with their lives, they will revolt," was an explosive "That's bad!" He went on to invent a long story about a wife who quarrelled with her husband, divorced him, married and quarrelled again, divorced again, and so on. When we asked Ronald if the generalization also applied to nations, he made up a story about nations fighting over pigs.

The examiner in the discussion of strong and weak nations asked Ronald at the outset if he knew what "dominate" meant. This may be presumed to have influenced Ronald's set toward the question, "What do you think of this idea?" and we should perhaps not stress the fact that Ronald did not comment on the truth (or untruth) of the statement until the examiner asked, "Do you think this idea is always true?" Still, this is the only time in our interviews that the question of truth, as opposed to applicability, arose with Ronald, whereas it was continually an issue for Keith. Ronald seems, in short, to be able to imagine examples of generalizations given to him, but he does not treat them as a model of reality, that is, as necessary for the explanation of reality and as requiring distinctions between positive and negative instances in reality.

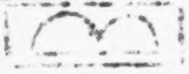
Ronald's lack of concern for the truth of generalizations seems to go along with his being much less preoccupied than Keith with whether he himself was right or wrong, a fact which was epitomized in the respective sayings of the two boys when an alternative to something they had said was suggested. Ronald tended to say, "Oh, is that so?" or "Oh, I didn't think of that," whereas Keith was more likely to say, "Oh, I was wrong," or "Oh, oh, I made a goof" or "I made a booboo."

iii. Creativity. So far, the application of this analysis to Ronald's having suggested that the United States might invade Mexico is simply that Ronald is not concerned and therefore not constrained by the possibility that his imagined example might not be true. We have implied often, however, that there is a more positive aspect of this, Ronald's high inventiveness or creativity. It was to check out our intuitive sensing of this that we administered to Ronald and Keith items from each of the 6 subtests of the Wallach and Kogan creativity inventory. We have no way of comparing the boys with Wallach and Kogan's population, but we can learn something from comparing them with each other.

Table I

Scores* of Ronald and Keith on the Wallach and Kogan Creativity Inventory

		No. Items	Scores	
			Ronald	Keith
I.	Alternative uses.	5	36	29
II.	Pattern meanings.	5	50	23
III.	Instances.	3	76	33
IV.	Physiognomic sensitivity.	8	19	20
V.	Similarities.	4	20	20
VI.	Line meanings.	3	15	14

Ronald seems to have warmed to the task on the first three subtests and was clearly producing more than Keith on II and III. (Of course, the tests were administered to the boys separately. Knowing that our expectation could influence the result, we were especially encouraging to Keith, reminding him that he could take as much time as he wanted, but not trying to rattle him.) To give the flavor of Ronald at his best, let us cite one of his more productive responses. A task II item presents a drawing , which can be turned in any direction, and asks the subject to name everything he thinks it could be. Ronald suggested the following: suns, the letter B, a butterfly, a roller coaster, two houses, a house and barn, flying saucers, igloos, egg shells, two spoons, bowls of fruit, elephant's toes, the hoofs of a horse, train wheels, eyes, eyebrows, the bags under someone's eyes, teeth, racing glasses, the eyes of an insect, the body of an ant, and a tree cut in half by a buzzsaw. This is a condensed version of Ronald's list. A number of his suggestions were a good deal more vivid, for example, where we have written "bowls of fruit," he described, "Two bowls of luscious fruit, strawberries and peaches and apples, laid out on a table for a picnic."

Keith's response to this item was as follows: two rainbows, eyes, C's with and L, Beatle glasses, and two hills. Interestingly, Keith told us at length about having seen two rainbows (or a double rainbow) on a recent vacation, and we felt from his manner of telling this that he was more concerned to justify his response than to tell us what the rainbows looked like.

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* Only the total number of responses, not their originality, has been recorded

Ronald's not scoring higher than Keith on the sensitivity to stick figures, or physignomic sensitivity task, seems to contradict our observation that Ronald was more concerned with people's feelings than any other of our subjects. It is possible that our presenting only 8 of the 35 items used by Wallach and Kogan did not provide sufficient data to differentiate the children, yet our feeling at the time of administration was that, if anything, Keith would do better than Ronald with more items. It should be noticed that this is the one convergent task in the subtests we chose from the Wallach and Kogan battery. To be able to perceive the conventional expressions and postures of people's feelings on demand does not necessarily imply that one would spontaneously attribute feelings to people in a problem or story. We also wonder whether Ronald's tendency not to answer at an appropriate or required level of abstraction accounts for his (and some other children's) responding to some of the stick figures in terms of the concrete details rather than the theme or organization of a given figure. Both considerations that we have raised here to account for Ronald's not scoring higher than Keith on this task have caused us to go back to Wallach and Kogan and look again at their findings. It turns out that high intelligence and high creativity, as they define these, are orthogonal contributers to the sensitivity to stick figures task. It thus makes sense to find Ronald and Keith, who appear to be somewhat opposite in these attributes, making equivalent scores on the task.

Ronald's scoring the same as Keith on the similarities task is more difficult to interpret. Performance on the similarities task correlates more highly with the other creativity measures used by Wallach and Kogan than with their intelligence measures, so on this ground alone we should expect Ronald (if he is indeed high in creativity and low in conventionally defined intelligence) to score higher on the similarities subtest. However, the task calls for the same operations of categorizing that we have previously noted Ronald performs less well than Keith, except that now just two instead of three or more terms are to be related at a time. Furthermore, Wallach and Kogan associate with conventional intelligence the type of analytic-descriptive thinking that is most involved in categorizing, while they associate with creativity a relational-thematic kind of thinking that seems (from a rather turgid discussion) to result in somewhat less categorizing, at the same time that it develops other relationships among terms. That Ronald and Keith in fact produce the same number of categories for this subtest may be the result of a counterbalancing of the two factors of inventiveness and set to categorize. It may point to something more that needs to be studied, particularly the significance of Ronald's coming up with categories for 2 term items when he had not previously produced categories to include 3 or more terms.

Finally, Ronald's producing the same number of line meanings as Keith we took to be partly a result, at the time, of his being tired or bored, perhaps as a function of the preceding change toward more test-like tasks. (Keith, by contrast, expressed disappointment when we were done.) The line drawings have struck us as being considerably more abstract than the patterns of the second task, and we have wondered if this might not be also a factor. Scores on this task seem to be more highly correlated with intelligence scores than are the other creativity tasks, yet Wallach and Kogan include it nonetheless in their creativity inventory.

During the first two weeks of our instruction Ronald illustrated the law cases with cartoons he drew in class. After the first time one of our research staff reacted positively to these cartoons, other children in the class, including Keith, became quite intrigued with them and started to draw cartoons of their own. The drawing tapered off as the mock trial got underway, but Ronald's teacher later told us he "filled up his desk with drawings" throughout the year.

Ronald once told us at length about a "novel" he was writing, a space adventure called "The Dogs from Mars". He sketched out "ten chapters" of the projected book, a child's story on a very ambitious scale. At the time we were not yet alerted to the significance of this aspect of Ronald's thinking, and we did not ask to see any of the novel. Now we suspect it existed in the drawings that piled up in Ronald's desk. He said he wished he could get it published, but he had no idea how it could be done. We suggested that he and Keith try to print it up themselves, but of course this was fantasy and avoiding the question on our part. A cheap printing press of the sort that has been introduced into some elementary school classrooms might make many things possible for Ronald, and for Keith too. As things stand, "The Dogs from Mars" may be both the first and last of Ronald's novels.

iv. Scientific problem solving. Ronald's performance on the Belanger pendulum problems throws still a new light on his thinking. The 5 subjects in Ronald's school were rated on four criteria by the examiner, the author, who conducted both the learning sessions and the pretest and posttest. These criteria were: variety of hypotheses, consistency of explanations, generality of explanations, and persistence in attempting to explain. Ronald was ranked highest on all but one of these criteria, the one being consistency, in which he ranked third (after Keith and another child). Since Professor Belanger administered the problems to our first group of subjects, it is difficult to compare Ronald with them. From inspection of the protocols he appears overall to rate higher than three, and perhaps four of these first five subjects, though his I.Q. is lower than all of them.

The pendulum problem -- to figure out what determines the period of the pendulum -- is quite abstract when one must start from scratch. However, the children were given the four variables they experimented with, weight, length, amplitude, and push, and thus they did not themselves have to abstract these from the situation. Furthermore, they experimented with each variable alone on a different day, so that the problem did not require them to isolate the variables, the key operation in the Piaget version of the experiment. These conditions may have been especially propitious for Ronald. We guess that he might have had trouble establishing and controlling the relevant variables. Even with the examiner telling Ronald which variable to test on a given day, he tended on two occasions, as Keith did not, to vary more than one condition at a time. Nevertheless, with the appropriate level of abstraction effectivel determined for him, Ronald generated a variety of testable hypotheses.

That the variables were not completely determined for the children was reflected in some of the other subjects' solutions. For example, one boy concluded that the pendulum moves faster when it is higher up, "like an airplane" and moves slower down low, "like a boat". Another boy invented the idea of a point on the ground that was somehow controlling the pendulum. Keith too, we will see, introduced an extraneous variable to protect, invalidly, a hypothesis that was not confirmed by the data. In comparison to some of the children therefore, Ronald appears to have been more constrained or disciplined by the data and the given variables. On reflection, this does not seem ipso facto contracidtory to his being less constrained in a purely verbal situation, but it comes as a surprise nonetheless. A common denominator to both performances is his low defensiveness, and another is his orientation to the concrete context.

Ronald generated and tested more hypotheses than any of his classmates and all but one of the subjects tested by Belanger. When asked to explain on the post test why he thought pushing the pendulum made no difference in its period, Ronald wrote,"It will go faster but it has farther to go". Here he stated a compensatory relationship between amplitude and velocity, a response that Belanger says is "pretty good" for 6th graders he has dealt with (all suburban children), and that was grasped by only two others of our 10 subjects (both of them in the first experimental group). On the other hand, Ronald missed one of two other posttest items on amplitude:

#4. The pendulum held out further will make (MORE) (FEWER) (SAME) number of round trips in 15 seconds because . . . . SAME, "It must always come out that way."

#10. The pendulum which will make the greatest number of round trips in 15 seconds (THE RIGHT ONE) (THE LEFT ONE) (WILL MAKE THE SAME NUMBER) [the left pendulum has a smaller amplitude] . . . . THE LEFT ONE, "It does not have as far to go."

In this inconsistency we think we see the effect of Ronald's not thinking as systematically as Keith, that is, not checking each of his responses against the various possibilities or, at the least, against each other. At the same time, we find overall that he is more generative, which means, again, that from the outset he combined the variables of the problem to yield a variety of hypotheses. Thus we think we notice in Ronald's pendulum performance the effect of three factors, high generativeness, low systematization, and low defensiveness, which seem to be rooted as much in his general style and personality as in the more objective or impersonal schemata of the combinatorial, etc., to which Piaget attributes differences in subjects' performances. "Low systematization" we admit begs the question somewhat. We have in mind Ronald's "funniness" about levels of abstraction, as well as his inconsistency in the pendulum problem, and we do not know what effect on this the mastery of hierarchical and combinatorial schemata would have. We must also bear in mind Ronald's capacity to generate complex examples and analogies, which requires a certain kind of systematization of one's thought. Perhaps his is a systematization governed more by concrete than by abstract models, but this too must be differentiated from that view which takes the concrete as just a stage in one's development toward abstract thinking (e.g., Werner, 1948).

v. Defensiveness and anxiety. Let us elaborate some on Ronald's low defensiveness, which we have noticed now in his not clinging to unconfirmed hypotheses in the pendulum problem and in his general "What-d'-you-know!" response to different ways of looking at something (generalizations excepted). Wallach and Kogan observe that low defensiveness is associated more with creativity than with high conventional intelligence, while moderately low test anxiety is associated more with high intelligence. Ronald's teacher, without having in mind anything like our own construction of things, told us that Ronald had "the weakest defenses" of all the boys in his room, and that he cried when the teacher spoke harshly to him. Most of the boys, and particularly Keith, resisted the teacher's criticism and, in the teacher's own words, "put up a fight". Wallach and Kogan's concept of low defensiveness might not have been meant to suggest weak defenses, but the combination is plausible and interesting.

Still another angle on this is Ronald's high suggestibility. When we administered the Easton and Hess questionnaire to Ronald and Keith jointly Ronald was much more influenced by Keith, as they discussed some of their responses together, than vice versa. Keith, to be sure, had a general influence on Ronald that we shall take more note of further on. However, we ourselves found it easier to suggest ideas to Ronald than to Keith under certain conditions. These conditions can perhaps best be defined as a state of high pressure and demand from us. When the heat was on, Ronald tended to comply or clam up, while Keith stuck by his original ideas or point of view. At the same time, Ronald was less tuned in to our more subtle cues, and he seemed less concerned than Keith with conforming to our expectations when the pressure was low. Since in most of our interactions with the children we tried to present as little threat as possible, we observed Ronald's nonconformity and looseness much more than his yielding and switching. With Keith, as we will show in writing him up, we observed much monitoring of subtle cues, but sometimes saw him get his back up and defend a response quite staunchly.

Ronald's "dutifulness" and "passivity" in response to the Stanford-Binet may reflect high anxiety in the conventionally convergent testing situation. We have no independent measure of this, and perhaps it would be more valid to say simply that Ronald "tuned out" of the Stanford-Binet. His behavior on this occasion was in marked contrast to his response to the first part of the Wallach and Kogan inventory, when he flourished and beamed under the relatively open conditions of the interview. Keith, by contrast, seemed uneasy at first and literally tried to make the inventory a more conventional testing situation, by, for example, calling time on himself at certain points (there was in fact no time limit) so that he could "go on to the next question." And Keith was correspondingly more eager to continue "the test" at the end.

vi. Defensiveness and anxiety continued, and moral judgment. It was during the administration of the Kohlberg moral dilemmas that we first thought we noticed these dimensions, relative anxiety and defensiveness, in Ronald's and Keith's behavior. At the time we did not label these that way, but the examiner noted in the margin of Ronald's protocol that "something happened" midway through our discussion of the second of the four dilemmas. Since we are about to consider the development of Ronald's moral judgment in general, we will reproduce the dialogue of the first two dilemmas, to give the reader some feeling for it:

Ex:-- Joe was a 14-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the $40 it cost to go, and a little more besides. But just before camp was going to start, his father changed his mind about letting him go. His father's friends had decided to go on a special fishing trip and Joe's father was short the money it would cost him to go with them. So he told Joe to give him the money he had saved from the paper route. Joe didn't want to give up going to camp, so he thought of refusing to give his father the money.

Q. Should Joe refuse to give his father the money or should he give it to him?

Ron-- Joe should refuse. His father promised him he could go to camp. It took him a long time to earn and save up all the money, he was tired and he had worked hard.

Ex:-- Would a loyal son loan his father the money?

Ron-- Yes, if he wanted to give up camp.

Ex:-- Does his father have the right to ask Joe for the money?

Ron-- Yes.

Ex:-- What would be the best reason for Joe to give his father the money?

Ron-- If his father would give him another chance. His father should pay him back or save up more so he can go.

Ex:-- Joe wanted to go to camp but he was afraid to outright refuse to give his father the money. So he gave his father $10 and told him that was all he had made. He took the other $40 he had made and paid for the camp with it. He told his father that the head of the camp said he could go then and pay for it later. So he went to camp, but his father didn't have enough money to go on the fishing trip with only the $10.

Did Joe do wrong in doing that or was he justified in doing that under the circumstances?

Ron-- Yes, he was justified.

Ex:-- Joe's father broke his promise about letting Joe go to camp. Was that wrong or was it all right under the circumstances?

Ron-- It was wrong for the father to break his promise.

Ex:-- Which is worse: a son breaking a promise to his father or a father breaking a promise to his son?

Ron-- It would be worse for a father to break his promise to his son because the son would really be expecting it, he would really plan to go, and the father wouldn't take it as hard.

Ex:-- Why wouldn't someone break a promise anyhow?

Ron-- Because other people make preparations. They have all that work, they make their plans, and then they find out they can't go.

Ex:-- Later Joe's father found out that Joe had lied to him about the money. What should his father do when Joe gets back from camp?

Ron-- He should question him, find out why he did it.

Ex:-- Should he punish Joe for lying?

Ron-- No.

Ex:-- What would you do if you were Joe's father?

Ron-- I'd tell him I was sorry I'd broken my promise. I'd go to him and say if I was a boy I'd have done the same thing.

Ex:-- (Situation II) Before Joe went to camp, he told his older brother Alexander how he really made $50 and that he had lied about it to their father. Alexander wonders if he should tell his father or not. If he does tell, his father will be angry and will punish Joe. If Alexander doesn't tell, his father may never know about it.

Q. Should Alexander tell his father that Joe lied about the money or should he keep quiet what Joe has told him?

Ron-- He should keep it private, keep it private, keep it a secret til he's a big grown man. Then he could tell, but it would be too late to do anything about it because it was so long ago.

Ex:-- Why shouldn't he tell right away?

Ron-- Because if the other guy trusts him then he'll feel guilty. Also the other guy will get a gang of boys and beat him up.

Ex:-- Would it be wrong for Alex to tell, or is it up to how he feels?

Ron-- It's up to how he feels.

Ex:-- Why would he think he should tell?

Ron-- Well, if he thought it was really necessary, he'd tell.

Ex:-- What would Joe think of Alex if he told?

Ron-- He'd be mad.

Ex:-- Would he be a loyal son if he kept quiet?

Ron-- No, he shouldn't keep a secret from his father unless he has a real good reason for doing it.

Ex:-- Would it be Alex's fault if Joe got punished?

Ron-- Yes, if he told on him.

Ex:-- Would he be a loyal son if he kept quiet?

Ron-- No.

Ex:-- Which is more important, being a loyal son or a loyal brother?

Ron-- A loyal son.

Ex:-- Suppose their father actually asked Alex whether Joe had lied about how much money he had earned. Should Alex tell his father the truth or should he get out of answering?

Ron-- He should get out of answering.

Let us notice first how toward the end of the second dilemma Ronald seems to have switched his position to align more with the father, or with telling the father, a stance that contradicts his earlier position of waiting to tell the father and, indeed, the spirit of his approach to the whole first situation. What accounts for Ronald's switch?

From the point where the examiner asked Ronald, "Why would he [Alex] think he should tell?" we thought we sensed (though we were only half aware of it as it happened) Ronald's cooling toward the interview and simultaneously trying to accomodate to the implicit thrust of the examiner's questions. One index of this is Ronald's becoming less expansive, or, more simply, his answers becoming briefer during the latter part of the second situation. We speculate that Ronald at first accepted our assurances that we were not giving him a "school test" and only wanted to find out how he thought about certain problems, and that subsequently he started responding to us as if we were in fact driving for right answers and as if it was necessary for him to say the right things. As the task became more convergent, Ronald to some extent converged on the answers implied by our questions, and to some extent simply responded less.

The sequence and substance of our questions was determined by the Kohlberg protocol. We have since realized that even this highly structured interview can be conducted in such a way as to make our questions appear to be more specifically contingent on the subject's preceding responses, for example, by incorporating more of the subject's words and phrasing in our follow ups. That we did not do so, but used Kohlberg's questions literally, might have made it appear, among other things, like we were playing the familiar game of the teacher trying to fish out of the student what the teacher has in his own mind, or more generally, like we were angling for the "official" answers. The specific question that seems to have precipitated this, "Why would Alex think he should tell?", especially has this potential. It takes a considerable transformation to hear the question as it was meant, "If Alex ever thought he should tell, what might be his reason for it?" That Ronald should respond in some way and at some point to questions as if they were leading does not tell us much about him. What is informative is the contrast with his behavior when he is not responding to questions this way (especially when they are in fact meant to be leading!), which for Ronald is the more usual mode of response. The comparison to be made later with Keith will illuminate this more.

It will be convenient to give here Kohlberg's brief resume of the six types of moral judgment that he feels have been validated in his research. As he stresses, these are "ideal types", so that only rarely would individuals conform exactly to all the characteristics of one type or another as given. Nevertheless, the types represent empirically confirmed clusters and sequences of behavior, and in our own research they have been very useful in relating the children's performance on the dilemmas to their behavior in other situations, especially the law material.

SCHEMA OF DEVELOPMENTAL TYPES

(Kohlberg, 1958)

Level I - Value resides in external quasi-physical happenings, in bad acts, or in quasi-physical needs rather than in persons and standards.

Type 1: Obedience and punishment orientation. Egocentric deference to superior power or prestige, or a trouble-avoiding act. Objective responsibility.

Type 2: Naively egoistic orientation. Right action is that instrumentally satisfying the self's needs and occasionally other's. Awareness of relativism of value to each actor's needs and perspective. Naive egalitariansim and orientation to exchange and reciprocity.

Level II - Moral value resides in performing good or right roles, in maintaining the conventional order and the expectancies of others.

Type 3: Good boy orientation. Orientation to approval and to pleasing and helping others. Conformity to stereotypical images of majority or natural role behavior and judgment by intentions.

Type 4. Authority and social order maintaining orientation. Orientation to "doing duty" and to showing respect for authority and maintaining the given social order for its own sake. Regard for earned expectations or others.

Level III - Moral value resides in conformity by the self to shared or shareable standards, rights or duties.

Type 5: Contractual legalistic orientation. Recognition of an arbitrary element or starting point in rules or expectations for the sake of agreement. Duty defined in terms of contract, general avoidance of violation of the will or rights of others, and majority will and welfare.

Type 6: Conscience or principle orientation. Orientation not only to actually ordained social rules but to principles of choice involving appeal to logical universality and consistency. Orientation to conscience as a directing agent and to mutual respect and trust.

Following Kohlberg, two different systems have been used to score our subjects' protocols and thus classify them as to level and type. First, we have matched each discussion of a situation or dilemma with model discussions provided in Kohlberg's Global Rating Guide. On this basis Ronald's four discussions were typed as 5, 5/2, 2/5, and 2 respectively. Second, each sentence in a subject's protocol has been classified, using a second, more detailed coding scheme developed by Kohlberg. Those statements of Ronald's that could be classified (in any protocol, many cannot) were distributed evenly between all three levels of the Kohlberg scheme: 6 in Types 1 and 2, 6 in Types 3 and 4, and 6 in Type 5. (No statements in Ronald's protocol were classified as Type 6.) In line with the shifts reflected in the global ratings, there is a trend from predominantly higher to predominantly lower level statements in Ronald's protocol, although statements at different levels occur cheek by jowl throughout his discussions, as, for instance, in his giving as reasons for Alex's not telling, Joe's trust (Type 5) and the possibility that Joe would beat up Alex (Type 1). On a scale between 100 and 600, Ronald's total score by the first rating system is 360 and by the second is 333.

Before analyzing the substance of these classifications, let us notice that the trend from a higher to a lower level in Ronald's discussions throws a further light on the shift that the examiner felt at the time of the interview. It suggests in what way the performance of a subject like Ronald may be affected by his perception of the interview as a test, if this is indeed what happened. Kohlberg has observed that sheer verbal output is one factor, or at least a correlate of more advanced performance on the moral dilemma.* One reason for this seems to be the degree of elaboration that is required to state a Level III position, for instance to distinguish among a person's various legal or contractual obligations. Thus the Global Rating Guide comments on Type 5 responses to situation II, "May not be very different from Type 2 except in containing more intermediate type elements." (In general the differences between Types 2 and 5 are quite pronounced, but they may be developmentally related, as we will notice shortly.) Another consideration is that the more advanced performance requires, almost by definition, a less egocentric or egoistic point of view, and this too may be discouraged or inhibited by a threatening test situation. All this is not meant to say that Ronald would have been a "pure" Type 5 under "normal" circumstances. The pattern of Ronald's responses is a mixture of Types 2 and 5, and we are discovering, or speculating about, the conditions under which the Type 2 or the Type 5 components predominate. Presumably in "real life" too, or in the classroom, Ronald's behavior shifts as a function of threat or some related factor. A similar observation could have been made before about Ronald's creativity.

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* Private communication to the author.

Sometime after making the analysis in the preceding paragraph, the author discovered that Kohlberg had already observed a correlation between a test-taking set and Level I responses to the moral dilemmas (Kohlberg, 1958). However, Kohlberg's point is more that a person whose moral judgment is on Level I will be more likely to have a test-taking set, that is, to try to guess what answers are expected of him. We are suggesting a somewhat different relationship, in which the test set, perhaps as a function of threat, may operate to shift the level of a person's moral judgment from a higher level toward Level I.

The validity of our claim that Ronald combines Types 2 and 5 in his moral judgment is open to question. Kohlberg has correlated individuals' use of the 6 types (as indicated by global ratings of individuals' discussions of the various dilemmas,) and has found increasingly high negative correlations as two types are increasingly separated in the developmental hierarchy. Moreover, Kohlberg maintains that the later types are not simply grafted onto the earlier ones, but are reorganizations of them. On the other hand, he does speak of "mixed" types, and at least in Ronald's case, Type 5 seems to provide a plausible form for the reorganization of Type 2. Two key elements of 5 that are missing in 2 are mutual respect (as opposed to mere exchange or "you scratch my back and I'll scratch yours,") and the idea of laws, contracts, and standards as social constructs. Ronald seems to have both of these to a fair extent. On the other hand, Ronald only occasionally gives evidence of another crucial element of 5, the idea that laws etc., define a social system. Kohlberg attributes much of the character of the Level III moral judgment to the development of formal thought in adolescence. We think we see Ronald anticipating it in certain respects, for example, in his distinguishing between role norms and performances. However, again, Ronald does not take generalizations or principles as models of reality and, as we saw with the Society Cards and the pendulum problems, does not use a system of concepts as a model.

Kohlberg's characterizations of Types 2 and 5 seem to be consistent with much that has been inferred about Ronald from other sources. Of course, we began to think in Kohlberg's terms fairly early in the project. Still, this was only one part of a very complicated mix, and in fact the Kohlberg material itself is very complex. We were therefore aided as much in understanding Kohlberg by our analysis of the children's other performances as vice versa, and we do not think we have just tailored Ronald to fit Kohlberg. If the reader will cast back to the Lumberyard interview he will find reflected there many features of the Type 2 and 5 moral judgment, for example, Ronald's relativism (his recognizing the viewpoints of the two parties to the dispute) and Ronald's recognition of an arbitrary starting point for the sake of an agreement (as in his proposal of a contest to settle the Golfcourse dispute.) Equally significant are the characteristics of the four remaining types of moral judgment that one does not find pronounced (though of course they are present) in Ronald's thinking. He is not particularly oriented toward obediance and punishment (Type 1) nor toward maintaining the conventional order and the expectancies of others (both 3 and 4). (This last statement means expectancies _pér se_. Ronald is very much concerned with mutually defined or contractual expectancies.) That he does not consciously employ universal principles of choice does not in itself differentiate Ronald from our other subjects, since none of them did so, perhaps because they have not reached the stage of formal thinking that would make this possible or likely. However, we have reason to anticipate that Ronald, because of the contextual style of his thought, will be less inclined to resort to universal principles even when his thinking has reached its full development (whether it should then be called "formal" a la Piaget or something else.)

It must be stressed that in saying Ronald is not oriented to punishment or to fulfilling expectancies, we are referring to his cognitive performance rather than to his everyday actions with people. We have little to go on other than our most casual observations, but it is our hunch that there are two lines in the development of Ronald's moral judgment, a cognitive line moving directly from an organization focused in Type 2 to a reorganization focused in Type 5, and an action line that is proceding from Type 1 to Types 3 and 4. We do not know what this does to our own postulates about the continuity of thought and action, or of experience and conceptualization. Perhaps action under the rubrics of Types 1, 3, and 4, can be subsumed or rationalized under 2 and 5 as "playing the game", a construction that often, but not always, seems especially applicable to Ronald. Kohlberg's ideal types are to be sure, not meant to be compounded in this manner, but it seems like the most direct way to raise the question that has occurred to us.

That as many of Ronald's individual statements can be classified in Types 3 and 4 as in 1 and 2 or in 5 may signify that a statement which is of one type in and of itself can function in an argument whose overall pattern is of another type. For example, Ronald's opening statement in the first discussion, "His father promised him he could go to camp," in itself is classified in Type 4. The statement implies a concern for maintaining expectations per se (in this case Joe's expectation of the father,), or to put it differently, by itself it cannot be taken to imply more than this. Ronald's subsequent emphasis on Joe's planning elevates the general tenor of the discussion to a contractual conception of expectations. It is not the mere presence of Type 5 statements, however, that result in the discussions being classified as Type 5 according to the Global Rating Guide. Kohlberg suggests that a Type 4 discussion of Situation I will be basically "oriented to an internalized sense of the father's authority," with the result, among other things, that the subject decides Joe should give the money to his father. A Type 5 discussion is "oriented to a sense of contractual rights in the situation, in terms of which the diffuse father-son relationship is irrelevant," with the result that the subject chooses, with little uncertainty, to refuse the money. Thus Ronald's initial statement that the father had made a promise, while it is technically Type 4, turns out not to be characteristic even of a Type 4 discussion. A more likely Type 4 statement in the latter case would be the subject's saying it was the sons's duty to give his father the money, or that the father had the authority to keep his son from camp.

Kohlberg does not report correlations among statements (as opposed to discussion ratings) of the 6 types. From inspection of two cases that he gives statistics for, and from a comparison with the other cases in our own sample, we observe that Ronald's statements are somewhat less concentrated in a given portion of the scale. Whether this pattern would continue to hold in more discussions, and what it would signify, must remain in doubt.

Ronald's responses to two items on the Easton and Hess questionnaire gain a little significance when viewed from the standpoint of his moral development. Ronald checked 'No' and Keith 'Yes' for the statement, "It is all right for the government to lie to another country if the lie protects the American people." Easton and Hess report that the average response to this item moves steadily from 2.25 at Grade 3 to 2.85 at Grade 6, which is in the direction from 'yes'(2) to 'no'(3). Ronald's is thus the more mature response in a crudely operational sense.

Another Easton and Hess item presents the children with the following question:

> (40) If you think a policeman is wrong in what he tells you to do, what would you do? Put an X beside the one that tells what you would do.
>
> 1. Do what he tells you and forget it.
> 2. Do what he tells you but tell your father about it.
> 3. Do what he tells you but ask the policeman why.
> 4. Do what he tells you but tell the policeman he is wrong.

Ronald checked #3, whereas Keith checked #2 for this question. Again, Ronald's response is the more mature one on Easton and Hess's scale.

vii. Impulsiveness. One last observation is also based on a comparison of Ronald's performance with Keith's on the Easton and Hess questionnaire, but fits our general experience with the two boys. Ronald tended to react much more swiftly than Keith to the items. We predict that he would be closer to the impulsive end of Kagan's impulsive-reflective continuum, while Keith would be closer to the reflective end (Kagan, 1965). It should be clear now, however, that this does not mean Ronald is less "reflective" in the larger sense, for he seems to have a greater capacity to look at things from different angles. Like all our generalizations about the children, the judgment that Ronald is less reflective takes on a different significance when it is joined with our other observations.

Ronald's Family and School History

Ronald lives with his mother and father, a brother who is 11 years old, and a sister who is 10. The 5-room second-floor that they occupy in the house they own is amply and colorfully furnished. Tinted pictures of members of the family are displayed in the living room, a preacher's certificate hangs framed on the wall, and much of the furniture and carpeting is covered with plastic sheets to keep it clean. Ronald's father has recently hired a man to remake the front porch railing, taking his idea from an interesting geometric design from a porch across the street. There is a small patch of bare yard in front of the house, but it serves no observable function. Ronald plays in the whole neighborhood, when he is not sitting in front of the television set in the upstairs entranceway as he seems to do much of the time.

Each time we encountered him Ronald's father, a post office janitor, was wearing a freshly laundered workman's uniform. When we first telephoned him for permission to interview his child at home, he voluntarily suggested a time when we could meet him and his wife, a privilege we had been advised by the school not to request on the presumption that parents would resent our intrusion. Mr. S. was very hospitable and at the same time rather awkard. He always waited for our lead in the conversation, and he shifted uncomfortably in his chair as we talked, somewhat, it occurs to us now, in a manner like Ronald's. For Ronald too waited for our questions, though he was generally much more fluent than his father in answering. We imagined that our being white, our different dress and language, and our appearing in a role like that of a teacher, all contributed to Mr. S's uneasiness.

Mrs. S., whom we met in the store around the corner in which she sells shoes, was more relaxed with us and told us more than we specifically asked for in our questions.

Most of our conversations with Ronald's parents, as with all the parents in our study, consisted of variations on conventional statements of role norms for boys in the family, at play, and in school. In the brief time we had to talk together it was difficult to get to, or even sense the direction of, the significant particulars. The few leads that we did glean can be reported here fairly briefly.

Mr. S. Told us that Ronald had always been a somewhat "puny" child, small and underdeveloped for his age. For some time now Ronald's younger brother has been bigger than he and able to beat him up, and the father frequently intervenes to break up fights. Most of the time Mr. S. talks with the boys about how they should behave, but once in a while he feels he has to give them a "hiding". The father takes his family on a variety of outings, to the country and so on, and one suspects that he and Ronald talk a lot about these activities

However, the father said that Ronald does not tell him much of what is "on his mind". Mr. S. did not know that Ronald had been studying law in school, though Ronald had previously told us of his mother's saying, "Listen to that boy talk about law! He'd make a lawyer!" Mr. S. said Ronald had wanted to be a carpenter when he was little and more recently had wanted to be a minister. After we remarked that Ronald had done well in the law study, his father asked us if we thought he should become a lawyer. He said Ronald's thinking had never seemed very special, and he was obviously pleased but somewhat baffled by our interest in Ronald. It was our general impression of Mr. S. that he was a stern and taciturn father, given to moralizing with his children, sympathetic to them but, at least in Ronald's case, not very skillful in drawing them out.

Mrs. S. also emphasized Ronald's frailness as a child, and we realized how central this was to both parents' thinking about him, a circumstance that surprised us since Ronald had not seemed particularly small or weak in comparison to his classmates. Height and weight measurements have been recorded annually on Ronald's school record, and we have been able to determine that his height and weight were very close to the means for American Negro boys at both 6 and 10 years of age. (Ronald's brother is actually larger than most boys his age, and in fact is larger than all but one of Ronald's male classmates.) Furthermore, Ronald's record of not more than 10 days of absence in any school year, (see Table II), does not suggest that he has been unusually prone to sickness. Mrs. S., however, spoke especially of Ronald's infancy. He was born two months prematurely and, so the mother said, his life seemed to hang in the balance for months thereafter. Partly for this reason and partly because they then lived on a third floor in a crowded neighborhood, Mrs. S. kept Ronald indoors most of the time and never let him out alone until he was old enough to go to kindergarten. She said she guessed they had been "overprotective" with Ronald, and that this might account for his now being shy and, she thought, socially underdeveloped.

Mrs. S. observed that Ronald was reticent to ask for things, for instance, for permission or money to go to the movies, and often he put Keith up to asking for him. He seemed to be especially afraid of his father, though both parents (and, one gathers, especially the mother) had tried to encourage Ronald to speak up more for himself. When he was angry or upset, he usually shut himself up in his room with a book, but he did not readily give vent to his feelings.

It was Mrs. S.'s recollection that Ronald did "alright" in school until the third grade, and then something happened and he started to have trouble. He was retained an extra year in the third grade and ever since then, in her perception, has brought home "bad" reports from school.

Mr. Smith completed eight years of school, while Mrs. Smith completed twelve, graduating from a public high school in the city where they now live.

How does one relate the little that we now know about Ronald's life in the family to what we have seen of his thinking? What we say about this will sound too sensible or too simple, precisely because we do not have enough of the details that complicate an explanation of a person and thus give it the texture of reality. We think that Ronald's action, much of which can be characterized in the words of the Stanford-Binet examiner as "dutiful" and "passive", and let us add defenseless, reflects his father's sternness and the excessive dependence of Ronald's early childhood. However, Ronald not only fears his father, he greatly respects him. This was clear not only from the more conventional things Ronald said and did, but from remarks like one he offered in response to an Easton and Hess question about his father's power to coerce people: "My father can't just beat people up, he's a preacher." Ronald in fact seems to have accepted on a verbal plane, as his father (who does beat Ronald up from time to time) has proffered on a verbal plane, the preacher's model of a person who tries to find peaceful solutions to problems and takes the standpoint of different parties to a conflict.

Whether there is a connection between the divergence and generativeness of Ronald's thinking and some feature of his family life, perhaps his mother's special encouragement of him, is very hard even to speculate about. If low defensiveness is a necessary, it is certainly not a sufficient condition of creativity.

We now turn to Ronald's school history, late in this report as it was examined relatively late in our study of Ronald. By sheer coincidence, a "case study" of Ronald, consisting of a summary of his school record together with the administration of standardized tests, was being made by school personnel at the same time that we conducted our own study. The most prominent item in the school's writeup of Ronald is a quotation of a report and recommendation made in May or June of 1962, presumably by the person who administered at this time (1962) a Revised Stanford-Binet Intelligence Test to Ronald. We ourselves have not seen the 1962 report, but the 1966 version of it reads as follows:

> Ronald S., Grade III
>
> CA 8.4   MA 6.8   IQ 80   Revised Stanford-Binet
>
> Observation: a quiet-mannered, clean, immature, colored boy. Passed the vision and hearing tests.
>
> The boy entered the City Public Schools on September 4, 1958, in Kindergarten at the age of 4-7. No record of retardation. In Grade II the boy received a 'D' rating in conduct and effort and failed in written and oral English and mental arithmetic. In September, 1961, he was placed in Grade III. He has been absent 3 days during the current school year and is failing in conduct, effort, reading, written English, spelling and arithmetic. Received unsatisfactory remarks in Respect for Authority, Cooperation, Self-Reliance and Workmanship.
>
> A letter was sent requesting the mother to come to the office on May 22nd, but the mother did not keep the appointment.
>
> Child is described as subject to day-dreaming, courteous, and lazy. Easily distracted by extraneous stimuli.
>
> Willingness: normal attitude
> Stanford Achievement 1962 (Grade 3)
> Paragraph meaning 2.7
> Arithmetic computation 2.9
>
> Conclusion: Chronologically ready for Grade IV but mentally too young for successful work in Grade IV, is even mentally young for Grade III. Would have profited by retardation in a lower grade.
>
> Recommend retardation in Grade III.

Ronald was in fact retained in Grade III. He entered Grade IV in September 1965 and has been promoted regularly each year since that time.

Let us first comment on the character and personality observations in the 1962 report. It was probably the Stanford-Binet examiner who described Ronald as "quiet-mannered, clean, and immature," and, later on, as "easily distracted by extraneous stimuli." It was very probably Ronald's third grade teacher who described him as "subject to day-dreaming, courteous, and lazy," for these terms occur in a checklist which the teachers each year are required to apply to the children. We have seen the list in the report of Ronald's 6th grade teacher, and because it suggests an important part of the frame of reference in which the children are perceived in Ronald's school, we will reproduce it here.

> Affectionate, confident, enthusiastic, joyous, responsive, aggressive, excitable, fearful, over-anxious, over-sensitive, quick-tempered, repressed, shy, sulky, subject to day-dreaming.
>
> Conscientious, cooperative, courteous, industrious, kind, loyal, obedient, reliable, self-controlled.
>
> Conceited, discourteous, disobedient, easily influenced, irritable, lazy, secretive, self-distrustful, selfish, stubborn, uncontrolled, unkind, vane.

Ronald's sixth grade teacher checked "subject to day-dreaming", "kind", and "lazy" in June, 1966. We do not know if he had examined or had even had access to the 1962 report. Perhaps he made these observations independently, or perhaps his perception of Ronald was influenced by the earlier teacher's view of him. What is more significant to us is the limited frame of reference in which both teachers were led to see and judge Ronald. "Subject to day-dreaming", instead of being related to other terms having more to do with the nature of a pupil's thinking, is couched in a heavily moralistic list of adjectives. We might ourselves have said that Ronald was a day-dreamer, or kind, or even lazy, but the terms take on a considerably different meaning in the light of our further thinking about him.

Ronald's attaining an IQ of 80 on the Stanford-Binet in 1962 by no means seems inconceivable to us, and yet we know now how inadequate an estimate of Ronald's intelligence this is. A year and a half later, in October, 1963, Ronald attained an IQ of 99 on the group administered Kuhlman-Anderson Intelligence Test. This "looks" more like the right figure for Ronald, but, again, it is not the whole story.

Table II summarizes the marks Ronald received from his teachers from the second through the sixth grades, and Table III shows Ronald's performance on standardized reading tests over that time. In Table IV are given both Ronald's and Keith's scores on the California Achievement Test, administered to the children at the end of Grade VI.

[Insert the tables here]

How does one reconcile Ronald's receiving a 'D' in reading in Grade II with his scoring close to Grade Level II on entering Grade II and well into Grade Level III at the end of Grade II? Again, how does one account for the score of 4.3 in September, 1962, the beginning of the year when Ronald was required to repeat Grade III? Several factors must be considered in trying to understand this.

TABLE II Marks for Ronald

	II 1960-61	III 1961-62	III 1962-63	IV 1963-64	V 1964-65	VI 1965-66
Quality of Workmanship	S	U	S	U	S	S
Self-Reliance	U	U	S	U	S	S
Courtesy	S	S	S	A	A	S
Cooperation	U	U	S	A	A	S
Respect for Property	U	S	S	A	A	S
Respect for Authority	S	U	S	A	A	S
Respect for Rights of Others	S	S	S	A	A	S
Industrial Arts				B	B	B
Physical Education				B	B	A
Health				B	B	A
Art				C	A	A
Music				C	A	A
Science				C	B	B
History				D	C	C
Geography				C	C	C
Written Arithmetic	C	E	C-	D	C	D
Mental Arithmetic	D	E	C-	D	C	D
Number Facts	C	E	C-			
Writing	C	C	A	C	B	C
Spelling	E	D	B	C	B	C
Oral English	D	C	C-	B	B	C
Written English	D	D	C-	B	B	C
Literature				B	B	C
Silent Reading				C		C
Oral Reading	C	C	B	B	B	C
Reading	D	D	C	C	C	C
Effort	D	D	C	C	C	X
Conduct	D	D	C	C	A	C
Tardy	5	0	0		2	0
Absent	10	10	2		2	8

TABLE III Reading Scores for Ronald

September, 1960	Gates Primary Reading	1.8	II
May, 1961	Gates Advanced Reading	3.3	II
September, 1961	Primary Diagnostic	2.6	III
May, 1962	Primary Diagnostic	2.9	III
September, 1962	Diagnostic Reading	4.3	III
September, 1963	Durrell Sullman	4.0	IV
May, 1964	Durrell Sullman	4.6	IV
June, 1966	Stanford Achievement Test	5.9	VI
June, 1966	Stanford Achievement Test	4.3	VI
September, 1966	Metropolitan Reading Test	7.4	VII
September, 1966	Metropolitan Reading Test	8.3	VII

TABLE IV California Achievement Test Scores

for Ronald and Keith, June, 1966

Ronald		Keith
5.7	Paragraph Meaning	6.2
5.5	Word Meaning	6.3
5.6	Average Reading	6.2
6.2	Spelling	4.5
7.1	Language	6.5
5.1	Arithmetic Reasoning	8.2
3.8	Arithmetic Computation	7.5
4.5	Average Arithmetic	7.9
5.6	Battery Median	6.4

The school itself would probably point first to the "immaturity" observed in Ronald at the end of his first year in Grade III. The slight improvement in Ronald's marks from 1962-63 on might then be cited as evidence that "retardation" (the school's unfortunate term for holding a child in a grade) had been beneficial to Ronald, perhaps through his being more able to attend to school tasks and work with, or in the presence of, other children. Today, though he is theoretically a year off the pace (in fact, many of Ronald's classmates have also been retarded a year,) Ronald is again perceived as a relatively immature child. His seventh grade guidance counselor cited Ronald's shyness and his not using a handkerchief as examples of his present "immaturity." We have wondered if Ronald's space fantasies are a sign of immaturity, especially those with anthropomorphic animals as characters, but we do not have a basis for comparison to other children. We do know that he plays with children his own age, including Keith. At school the games we saw the Grade VI boys play outdoors usually were playground sports like basketball, while in the neighborhood the play seemed to be more informal, ranging from war games to kick-the-can or just chasing around the area.

Ronald's "laziness" presumably relates to his not completing school assignments, and thus would be another factor in his failing reading at a time when, we have reason to believe, he was actually capable of the reading expected. It is doubtful that the elementary school made any demands on Ronald's time outside of class, so in-class tasks or assignments are the matter in question here.

During the five weeks of our law instruction Ronald consistently appeared to be one of the most interested of all the children. However, we worked always with the whole class or in small groups and it might be conjectured that Ronald would have been less motivated to do certain individual assignments. Ronald's Sixth Grade teacher told us that he was especially remiss in completing his arithmetic assignments, and Ronald told us that he liked arithmetic the least of his subjects, while he liked English and History the most. From Table IV it can be seen that Ronald's achievement in arithmetic at the end of Grade VI was the lowest in all the subject areas measured by the California Achievement Tests. We find ourselves wondering if a low ability or disposition for convergent thinking is a factor in this, affecting his general performance in school, but especially affecting his achievement in arithmetic. Ronald's difficulty with abstraction, which we might define most fruitfully in terms of his use of certain models of thinking, is presumably still another factor, but exactly what bearing it might have must remain an open question for now.

Ronald's divergence has certainly created problems for him. His sixth grade teacher characterized him to us as an "uninhibited dreamer," while his present seventh grade homeroom and English teacher spoke of him as a "funny duck," saying, "As soon as Ronald opens his mouth, you know it's different." This latter teacher cited Ronald's talking about space adventures as an example, but we imagine that in discussion with him she has felt the more general slippage and surprise that we ourselves sensed before we could begin to put our finger on it. This teacher also spoke of Ronald as "highly creative," and said she had placed on the class bulletin board an illustrated story by Ronald, about a trip the class had taken to the zoo. Since we were talking with her some time after we had concluded ourselves that he was creative, or at least has a potential to create, it was gratifying to know that a teacher had finally seen this in Ronald, and we wondered if her being an English teacher made her more receptive to it. We can imagine that some of Ronald's teachers have reacted quite negatively to his not responding to their questions in ways that they expect.

Ronald's average score of 7.9 on the Metropolitan Reading Test (cf. Table III0, administered this fall at the outset of Grade VII, takes on added significance when one considers that the median score for all 205 boys entering Grade VII in Ronald's school this fall was 5.5. Only 28 of these 205 boys were reading on grade level or above, and among these 28 (and thus in the whole class) Ronald ranked 10th. Almost all of the 205 boys were Negro. Why Ronald should have fared better than his classmates we cannot easily say. One might presume that his general fluency with words has been a factor, and maybe a systematic comparison of his home with the homes of his fellow students would reveal that he had had more support from his parents, linguistically or otherwise. Ronald's seventh grade English teacher also remarked on his "excellent English," his speaking "clearly" in "well-chosen words" and without "those dreary errors" that the teacher spends much of her time trying to correct in other pupils. Much of this was surely learned or determined before Ronald ever came to school and thus it could have made a difference in his learning to read. But what difference?

His poor marks of 'D,' 'C,' and 'C-' in Oral English during his three years in Grades II and III suggest again that many factors, on both the learner's and the teacher's side, have complicated the relationship between Ronald's capacity and his performance in school.

What Ronald will become or how he will do in the high school or in later life, we will not predict. How he will think about men and society even a few years from now we will not predict either. We do intend to go back to Ronald someday, and in the continuities and discontinuities between his present and his future thinking we hope to discern more of the patterns and processes that have now just begun to come clear to us.

Appendix to Chapter II

Some time after we had examined the school's case study of Ronald, and after our own writeup was completed, the testing and guidance office made a summary of the case. This summary, similar in format to the one made in 1962 and similar to a 1966 summary of Keith's case quoted in Chapter III, is reproduced here:

Ronald S.   Grade VI

Stanford-Binet Form L.M. administered by Dr. Esther Edwards of Harvard in June 1966 with the following results: CA 12/5, MA 12/4, IQ 98.

Health: vision passed, hearing passed, height 58, weight 86 1/2.

School history: Entered ____________________ School in Kindergarten at age 4,9. Entered Grade I at age 5,9. Retarded in Grade III. Tested at that time and found to have I.Q. of 80 on Stanford-Binet. Transferred to _________School in Grade 5. Has had good school attendance. Has been below grade level in reading each year. Failed in reading in Grade II. Spent two years in Grade III. Earned C's in all work of the grade in second year. Marked C in reading and B in arithmetic in Grade IV. Marked C in reading and arithmetic in Grade V. Failed in arithmetic in Grade VI and was marked C in reading.

[Insert California Achievement Test Scores Here.]

See Table IV (Page 69)

Conclusions:

1. Normal intelligence.
2. Average rate of mental growth.
3. Should achieve on a successful level in Grade VII.
4. Was retarded in Grade III.
5. Has been below grade each year in reading.
6. Achievement in arithmetic is more than two years below grade level.
7. Received failing marks in arithmetic this year.
8. Average achievement is more than a year below grade level.
9. Was marked C in all subjects except arithmetic.
10. Is to be promoted to Grade VII in September, 1966.
11. Child would benefit by extra help in arithmetic.

Recommendations:

1. Refer to a remedial reading clinic.
2. Refer to City Public Schools' Eye Clinic for vision evaluation.
3. Promotion to Grade VII in June 1966 would seem advisable.

It can be seen that the school did not venture the interpretation we predicted they would (cf. p. 70 above), of the effect of Ronald's Grade III retardation on his subsequent school performance. Instead, what emerges more oppressively than ever from this case summary is the dreariness and emptiness of school marks as a way of describing a child and his development.

CHAPTER III

KEITH

Our writeup of Keith will be briefer than Ronald's since we have already set up much of what we have to say about him. However, it is necessary to state at the outset that Keith is not simply Ronald's opposite number. The device of comparing the two boys tends to make them seem to be opposites, because their differences are more salient than their similarities and because the comparison of any two individuals tends to polarize their differences, instead of setting them in a more complicated, multi-dimensional frame of reference. Indeed, this oversimplification is the writer's problem as much as the reader's, and one function of our remarking it at this point, before launching into the Lumberyard Case, is to remind ourself that Keith must be approached as an individual in this analysis.

Even at the time of the Lumberyard interview, our comparison of the boys to one another was limiting, as well as facilitating, our perception of Keith. Whereas with Ronald we were trying hard to tune into a way of thinking that sounded increasingly dissonant to our ears, in the same measure we thought we were "onto" Keith as a familiar type and Ronald's opposite. To put it simply, Keith seemed to be looking for right answers from authorities, and we, intent on finding out what he thought "himself," were determined not to play his game. But how much did we respond selectively to certain features of Keith's thinking and encourage him to play the very game we did not want to be a part of? The same question could be asked in different terms of our relationship to Ronald, and indeed we have reason to do so. That subtle actions by the investigator can have significant effects on his subjects, even when he is striving to be neutral, is well established in research on research in psychology (Rosenthal, 1963). In our own case, this was confirmed for us as Keith became a more complex and mroe interesting person, virtually as a function of our asking if our initial reaction to Keith had partly blinded us to him, and as at the same time we wondered if we were not romanticizing Ronald's "looseness". How much of the Lumberyard interview that follows is Keith, and how much is us, is impossible to say exactly. The notion of an investigator-free interview is perhaps a little like the idea of a culture-free test, and subject to somewhat similar limitations As we did in the case of interpreting Ronald's interview on the moral dilemmas, we will take the position that this is Keith-reacting-to-us-as-examiner, an important side of Keith, but not the only side that we will notice.

N.B. It is important that the reader read the text of the Lumberyard interview and form his own impressions of it before passing to the examiner's interpretation.

The Lumberyard Interview.

1. Ex-- This is about the Hollowdale Lumberyard. The lumberyard was surrounded by a high board fence, and the gate was usually locked when there were no trucks going in or out. However, Kent and Renny hadn't had much trouble getting into the yard about a month ago, because they found a large shutter leaning against the fence that made a perfect ladder. They always wanted to explore the long rows of boards on the other side that were real great for hiding, and playing hide and seek. This day they found long rows of tunnels, great for hiding and sort of closed off from everything but the sky. As Kent ducked away from Renny and ran down one long aisle, he looked up at the sky overhead, thinking what a fine place they had discovered and how he and Renny should go and tell all their friends about it. Just then he saw a large board hurtling down on him from above. He tried to dodge it but couldn't. It hit him on the back and pinned him to the ground. Two workmen who had been stacking wood, had accidentally thrown one piece over the pile. They heard Kent cry, but they couldn't see him at first. By the time they arrived he had passed out. Renny was so scared, he ran off. Kent was badly injured and had to spend a long time in the hospital. His Dad was sitting by his bedside in the Children's Ward at the hospital, wondering what to do with all those bills that were piling up. What do you think he could do?

2. K:-- Do you mean the workmen knocked down the board?

3. Ex-- No, they were heaving the boards up onto the stack.

4. K:-- Did they know Kent was there?

5. Ex-- It doesn't say, we don't know that.

6. K:-- Couldn't his father pay the bill?

7. Ex-- No. Well, suppose he could and he just didn't want to?

8. K:-- I don't think he could do anything. If it wasn't the lumbermen's fault and Kent shouldn't have gone there.

9. Ex-- Well, I'll tell you something now. Lawyers are always trying to figure out all the angles to something. What kind of angle do you think they might try to figure out on this? Would they make any kind of argument?

10. K:-- About that fence, the ladder thing, they should have checked their fences every day, or something like that?

11. Ex-- What would the lumberyard say?

12. K:-- The boy shouldn't have been there in the first place, or they didn't know the shutter was there.

13. Ex-- Is this case like any other that we've talked about?

14. K:-- I think so. Same thing about the golf ball case. The guy didn't see the kids down there, and the guy hit the golf ball, and then, by the time he saw the kid it was too late and he hit the kid in the head.

15. Ex-- How else is it like that case.

16. K:-- A boy went through a fence.

17. Ex-- Any other way?

18. K:-- The father won.

19. Ex-- In which case?

20. K:-- Both probably.

21. Ex-- Oh, you think so. Why?

22. K:-- I don't know. I don't see why not.

23. Ex-- The father did win in the golf ball case.

24. K:-- Yes. But I don't see why in this case.

25. Ex-- It has to do with a couple of rules that the courts use. In the golf course case, the judge told the jury that a property owner has a certain responsibility. Do you remember what that was?

26. K:-- Make sure that his. . . .I know what it is but I can't say it in words. He should make sure that the fence is high enough. Something like that.

27. Ex-- Well, it's got to do with children especially. Property owner should take care . . .

28. K:-- And make sure that his property can't hurt no one else.

29. Ex-- He should take reasonable care to see that people, especially children don't get hurt. Why would that be?

30. K:-- Cause children always get into things.

31. Ex-- Every smart land owner should know that, and should be responsible for that. Remember the story about the dog and the man who set traps for the dogs?

32. K:-- No.

33. Ex-- You might not have been in the group that talked about it. In England, a long time ago there was a case that came to court. A man was putting traps out on his property and the traps, he said, were to catch foxes, but they were actually too big. He used to

put smelly meat in them, and a neighbor's dog smelled the meat and came on the man's property and got killed by the traps. So the man who set the traps said, "The dog was trespassing and was on my property. I'm not responsible." And the dog owner said, "No, my dog was lured onto your property by the meat that you put in the trap." And the court made the award to the dog's owner, because they said that the man's property was an attractive nuisance that was luring the dog into danger. That argument was used in the golf course case. Now how would that be used?

34. K:-- The boys were lured into it in the winter time.

35. Ex-- And because having a big beautiful golf course in the middle of the city, the property owner should know that the kids will come onto the property, because it is so attractive. Now how would that apply in the lumberyard case? . . . Or wouldn't it?

36. K:-- It's not attractive, the lumberyard.

37. Ex-- Suppose you were a kid playing in the neighborhood there.

38. K:-- I don't think I would go near the lumberyard.

39. Ex-- No? I think I might have. I used to play in a ditch a crew of men had dug in the street when I was a child.

40. K:-- Yeah, that's what I like to do.

41. Ex-- Suppose the judge in the lumberyard case said to the jury, "The property owner is responsible for protecting children against injury on his property." How do you think the jury would apply this in this case. Do you think the jury would have decided that the lumberyard had violated the rule or had not violated the rule?

42. K:-- They had not violated the rule. They had their fences up nice and high. Did they say the lumberyard put that thing there?

43. Ex-- We don't know. It doesn't say.

44. K:-- Well, they tried the best they could to keep the children out.

45. Ex-- Would there be any facts they would try to prove one way or another in court?

46. K:-- Whether the lumberyard put the screen up or whatever it was that they put up.

47. Ex-- Who would try to prove that?

48. K:-- The lawyer of Kent.

49. Ex-- How could that be proved?

50. K:-- I'd ask some other man.

51. Ex-- If it was still around, the shutter, they could go and get it, maybe the kids dragged it over, in that case it wouldn't be the lumberyard's fault. But maybe the lumberyard put it there.

52. K:-- It was on the other side of the fence, it wasn't their property. Why would they put it there?

53. Ex-- Oh yea, oh yea.

54. K:-- They've got a great big lumberyard and you think they'd put it inside.

55. Ex-- O.K. Well, that's the kind of fact they'd try to prove in court. Maybe it's just an open and shut case so they wouldn't even have to go to court. They could work it out ahead of time.

It is characteristic of Keith that he begins by asking us several questions. The function of his first question seems to be to establish whether or not the workmen in the lumberyard made a mistake. The function of the second appears to be similar but here we hit a snag. Keith, in concluding that the accident was not the lumbermen's fault, does not conserve the uncertainty in the examiner's response that "It [the story] doesn't say" if the workmen knew Kent was in the yard. The examiner felt, therefore, that a major function of Keith's question had been to sound him out, literally to get the examiner to say something that would indicate his position on the case; and since the examiner did not seem to state a position, Keith could fall back on his own. Though the examiner was not particularly conscious of this inference at the time, the language with which he responded to Keith definitely suggests that he had made it. It is as though he were saying, "Since you want me to tell you something, Keith, I will. Lawyers, like you, are always trying to figure out all the angles to something" Whether, in fact, Keith was trying to figure out the examiner cannot be said with any certainty. We are inclined to think it was an element of his approach, but also that our almost sarcastic response (though the tone of the examiner's voice was friendly here), may have heightened this attitude as much as it discouraged it.

We were responding with some disdain (though again we do not think it was in the examiner's voice) to another aspect of Keith's original position, what we took to be his limited view of the rights and wrongs of the case. This was first signaled by Keith's query about the father's ability to pay the bill, a fact which we considered irrelevant to the question of rights and liability, and was indicated further by his conclusion that nothing could be done "If it wasn't the lumbermen's fault and Kent shouldn't have gone in there." Keith's argument focuses on the presumption that the workmen were doing their job properly and on the fact that the boys were trespassing. He thus does not raise the question of whether the lumberyard itself might have an obligation to the boys even though its employees were working properly, end even though the boys were trespassing. It may be that Keith has already worked out in his mind his refutation of the lumberyard's responsibility for the shutter (cf. Stmt. 52), but we suspect that another factor is entering the picture as well, a relatively immature concept of moral or legal obligation. This is more difficult to state in Piaget's terms, which apply especially to primary group morality, than in Kohlberg's terms, which have greater application to the more complex problems of a larger society. Even from Piaget's point of view, the more mature child would be expected to take special account of younger children's nature, though not necessarily in every problem. However, in the Piaget scheme the more mature child would judge an act in terms of the actor's intentions rather than its physical consequences, and, again, would judge in terms of individual rather than collective responsibility, both of which judgments Keith makes here. The law in our society often holds to more sophisticated versions of what are represented by Piaget as the less mature concepts, and the potential liability of the lumberyard turns on just these points. Though Kohlberg does not happen to make this observation about the law, his scheme of moral development does allow for higher level forms of the concepts of collective or corporate responsibility and liability for consequences regardless of intentions. Keith, as we shall see, scored consistently low on the Kohlberg Moral Dilemmas.

The next turn in the Lumberyard interview was rather startling to the examiner. Immediately on being asked what kind of argument Kent's lawyer might make, Keith converged on the critical item, the shutter. Ronald, the reader will recall, turned to the shutter only after some prompting, while no other subject in this class, and only one in our other class, involved the shutter at any point in the argument. Either from the construction of the story, or our manner of reading it, or from his own swift analysis of all the possibilities, Keith sensed the importance of the shutter just as soon as the examiner raised his question.

It is especially at this juncture in the interview that we wish we had responded differently to Keith. The best response would have been to say, "What do you think would happen in court if Kent's lawyer used that argument?" Such a question might have invited Keith to develop the significance of the shutter angle, and more generally to elaborate the arguments for both sides. However, we did not think of this reply at the time, and we were concerned that a follow-up asking him more directly to develop the shutter argument would be interpreted by Keith as implicit confirmation of it, confirmation he seemed to be seeking by his inflecting his own voice at the end of his suggestion (Stmt. 10) so as to make a question of it. By asking what the lumberyard's lawyer would say in reply, we picked Keith off the hook and ended up, possibly, reinforcing his original position.

That Keith was quite alert to the nuances of our questioning is evident in the section that follows. In Stmts. 20 and 22 he indicates that he now thinks Kent's father will win in the Lumberyard Case, not because he accepts the argument (cf. Stmt. 24, "I don't see why in this case,") but, we presume, because we have been pushing the analogy to the Golfcourse Case, which Keith knows was won by the plaintiff. The tone of his "Both probably" (Stmt. 20) is baffled and at the same time resigned.

This orientation of the examiner and subject to each other as much as to the problem -- for the examiner is at least as caught up in it as Keith seems to be -- continues throughout the interview. In Stmt. 26, Keith's manner of hesitating after starting to state a rule, his saying "I know what it is but I can't say it in words," and the "Something like that," all call for support and assistance from the examiner, a tactic that is personally engaging and that equips Keith well to play the school game, as indeed it succeeds in this instance. In Stmt. 35 the examiner repeats his earlier strategy of attempting not to imply support for a position opposite to Keith's: "Now how would that apply in the Lumberyard Case? . . . or wouldn't it?" Keith in Stmt. 36 seems to take advantage of the examiner's escape clause. In Stmt. 40 Keith agrees with the examiner about playing in a ditch, but since Keith does not himself notice the possible implication of this for the issue of the lumberyard's attractiveness, the examiner chooses not to press it. Finally, in Stmt. 51 the interviewer has once again phrased an alternative for Keith so as to cut off a switch to the plaintiff's position, and this time has done it in such a way as to place the emphasis, as it need not be, on the question of whether the lumberyard itself left the shutter in a place where it gave entrance to the children.

Keith's interpersonal sensitivity in the examiner-subject situation does not extend to projecting himself into the thoughts or feelings of the children in the case. His saying the lumberyard was not attractive (Stmt. 36), and his saying "I don't think I would go near the lumberyard" in response to the examiner's asking him to suppose that he was a kid playing in the neighborhood, suggest strongly that he has less of a disposition than Ronald to empathize with or play another person's role, particularly in view of his subsequent admission that he too likes to play off limits (if we can assume he understood the trespassing connotation of the ditch analogy.) In the association here of Keith's test-like orientation to the examiner, with his not role taking and his not making or considering special allowances for children's nature, we can see a somewhat different case of the pattern that we first noted in the latter part of Ronald's Kohlberg interview. The less mature moral judgment again occurs in conjunction with listening for answers from the examiner.

With respect to the analogy of the Lumberyard and Golfcourse cases Keith, like Ronald, saw the factual correspondence of the cases but did not volunteer their possible analogy in terms of a general rule or principle of law. As we commented in comparing him with Ronald, Keith in Stmt. 26 gives a concrete injunction in a general form, in his effort to supply the rule we have asked for in Stmt. 25. He does not himself supply the qualification "reasonable," even though he had stated his manufacturer's liability rule the week before in terms of reasonable care, and, perhaps more important, had argued in favor of the defendent in the Golfcourse Case on the grounds that posting signs and employing rangers constituted reasonable care.

It was Ronald who had objected most forcefully to Keith, in a small group discussion, that the child who was injured on the golfcourse was too young to read the signs and that some witnesses said they had not seen the rangers or guard duty. Keith resisted these objections in the small group, but when his group was asked to report its deliberations to the class as a whole, he stated the objections as things his group had talked about.

There is a certain parallel in Keith's handling of the facts in the two cases. Whereas Ronald approached the facts more in terms of what actually worked or happened -- that the children did in fact gain entrance etc. -- Keith dealt with them more in terms of what *should* have happened, especially from the standpoint of the defendent's intentions. Thus he used the signs and guards as evidence of the golfcourse management's good intent, and in the Lumberyard Case he says, "They had their fences up nice and high" (Stmt. 42) and "They tried the best they could to keep the children out" (Stmt. 44). Now to be sure, a lawyer might well make the same argument. Keith, however, does not quite *make* it. He seems to be more concerned with proof than Ronald, specifically in his asking "Did they say the lumberyard put that thing there?" (Stmt. 42), but where the examiner replies, "We don't know," Keith *assumes* the very point he questioned about, just as he did earlier when the examiner gave the same reply to Keith's question about whether the workmen knew the boys were in the lumberyard (Stmts. 4, 5, and 8). It is as if Keith thought he did not have to take account of facts *the examiner does not know*, instead of facts a lawyer would need to establish in order to convince a court.

Perhaps the exchange that follows (Stmts. 45-54) seems to controvert this analysis, since Keith here not only identifies the question as a question of fact to be determined in court, but he takes issue with the examiner's statement (actually more of a query, in tone of voice), "But maybe the lumberyard put it there." (Stmt. 51). The examiner, however, had just previously sanctioned the possibility that the children might have dragged the shutter over, and had said that "in that case it wouldn't be the lumberyard's fault." His "Oh yea, oh yea" (Stmt. 53), in response to Keith's asking why the lumberyard would have placed the shutter on the other side of the fence, simultaneously expressed two thoughts: that Keith had made a good point, and that the examiner had used a bad strategy and it was time to quit.

Let us hope that the reader has not completely lost patience, either with the interview or with our analysis of it. Perhaps his curiosity is whetted to know more about the "real" Keith, not so much in isolation from us (for we had to talk with and observe him somehow), but in relation to more aspects of the "real" us. In a way, this was our own central problem, to become more of a person with both Keith and Ronald. Only in this way, and not the single role of teacher-examiner, could we come to know the children themselves as persons.

Keith's conceptions of law and society.

Keith seems to think of social conflicts and problems in more "official" terms than does Ronald, that is, he turns more readily to recognized offices and procedures for dealing with problems, or, this failing, he tends to feel there is no solution to be had, or none he can think of. In the Original Interview, when we introduced the Lord of the Flies situation by telling how a group of youngsters had been shipwrecked on an island, and then asked what problems the children would have to deal with, Keith said, "They would have to live in peace and vote in a leader, and then they'd have to make up some rules." (Ronald had responded to this same opening with a division of labor to make weapons, a storehouse and a treehouse.) When asked what would happen if the leader made up a rule that a lot of the children did not think was a good rule, he replied, "They should tell the leader and say he should make up another rule that does more for them." (Ronald: "They should disobey the rule.") If very few people agreed with the leader's rules, "He could write them on a piece of paper and hang them up on a bulletin board to show the people what to do." Then if the leader did nothing further to enforce the rules, "He didn't do the work he was supposed to, they shouldn't give him his rations, unless there was the excuse he was sick." (Cf. Ronald's "The people would disobey..., would throw things... would take over and do things their own way.") In these and other remarks of Keith's there seems to be a turning to and a reliance on accepted procedures of government, including what looks like a teacher's procedure at one point (the bulletin board). This is consistent with Keith's responding, "I'd go tell the teacher," when he was asked, earlier in the same interview, what he himself would do if he were in charge of a group of children on the school playground and one of them would not obey. (Ronald's response to this was, "I'd whallop him!", a remark which we are just now realizing is not consistent with our earlier claim that he was always trying to find a peaceful solution to a problem.) As far as we can determine, for example by comparing the two boys' performances on the Easton and Hess questionnaire (see below for a discussion of Keith's performance) Keith does not have more information about government and politics than does Ronald. Therefore, his emphasizing official roles and procedures can be said to stem from his way of conceptualizing what he know as much as from the sheer accummulation of knowledge itself.

There is very little evidence in the above responses of Keith's imagining the state of disorder that might occur, or the nonpeaceful acts that might take place, if the official system were to break down. On the other hand, when asked if law gives us more or less freedom, Keith said "less," because without law "people could take what they wanted and there would be a lot of confusion." Furthermore, Keith responded to the Lawyer Dialogue statement about lawyers' making trouble, "That's not true, because if you didn't have lawyers there would be worse fighting and trouble and everything to find out who was right or wrong." Again, in the Last Problem Keith observed, "If there wasn't any courts you'd just be fighting and fighting. Nobody would really find the solution. Like the story of the hillbilly boys who were fighting for 100 years and after a while they didn't even know what they were fighting about." This last comment was a reference to a story we had discussed with the class during the third week (before the Lawyer Dialogue to lead the children to see some of the reasons for resorting to courts to resolve disputes. Only Keith tied this thinking into the Lawyer Dialogue and the Last Problem, when we had thought we would get it from all our subjects. Perhaps Keith's thinking here is a good example of the deductive or "scientific" pattern of concept formation that Vygotsky characterizes as starting with an abstract formulation and gradually filling it in with detail (Vygotsky, 1962). Ronald's greater concrete feeling for what happens when order breaks down, together with his failure, on the several times when it was called for, to make a more general statement about it, seems to be an example of Vygotsky's inductive or "spontaneous" pattern of concept formation. Vygotsky argued that the scientific or deductive pattern was more typical of school learning and the spontaneous more characteristic of out of school learning. To the extent that this is so, Keith seems to be more in tune with the school mode of learning and thinking.

In the Original Interview Keith differentiated about as accurately as Ronald, and more so than his other classmates, between the roles of different persons in a court of law. However, Keith was quite different from Ronald, and far the most consistent of all the boys in claiming, especially in the Lawyer Dialogue, that lawyers and judges would adhere to their role norms rather than make deals, let the client down, etc. Thus, "Friend or no friend, he (the lawyer) has to get his client to win." "He (the judge) still has to give a fair judgment and it doesn't matter if it was his brother or his sister, it still has to be a fair judgment." Here, as in the Lumberyard interview (cf. the section about the yard's attractiveness to children,) Keith responds to a question about what would happen with an answer more in the vein of what should happen, without making allowances for or recognizing departures from the ideal. This, we should say, is the way Keith handles a choice or decision to be made in some future time. He does sometimes recognize "bad" actions, or performances that deviate from the norm, in cases where the act has already been completed. Even these, however, (as we noticed in analyzing the Lumberyard interview), he does not accept in the sense of one's saying. So it happened, now let's find out why. We might thus expect that Keith's understanding of the bases of these actions would be more limited than Ronald's.

In the various situations and interviews in which we observed him, both in and out of class, Keith demonstrated very little inclination to role play or to empathize with other persons. In the Moral Dilemmas, which we will look at in more detail later, Keith usually lined up on the side of authority against the person caught in a dilemma, while even when he took the other side it was not with any expression of sympathy or indignation so much as with a more analytic response to the examiner's asking a question like, "Which is worse, a son breaking a promise to his father or a father breaking a promise to his son?" This particular question we have used here as our example, because it happens that at the very end of the Moral Dilemmas interview Keith returned to it in an interesting way. When he was asked if he had any questions about what had been discussed, he went back to this first problem, saying,

> I'd like to know why the father broke his promise so that he told his son that if he saved up his money [he could go to camp], and his father was so cheap that he couldn't earn his own money and he had to take away the boy's money?

This question had much more feeling in it than anything Keith had said while "the test was still on," to put the matter most succinctly. Either he was just coming around to look at the problem this way, or he suppressed any feelings of this sort when he encountered the problem originally and said the boy should give the money to his father. If we accept both of these interpretations, we can say Keith's suppression of feeling inhibited his exploration of the problem until the interview was over.

Another interesting exception to our generalization about Keith's not empathizing with or taking the roles of others occurred in Keith's playing the defendent in our mock trial. The case concerned a woman who was alleged to have signed a contract allowing a furniture company to recover all of the goods sold her, even though some of them might in effect have been paid for, if, as new goods were added to her account, she defaulted on any payment. The woman brought suit against the company, claiming that she had been pressured into signing a contract she did not understand, and that she would not have signed such a contract if it had been explained to her. Keith, at our request, played the owner of the company, and Ronald played a salesman who had participated in the original sale and the signing of the contract. Both boys accepted the assignment with enthusiasm and on their own initiative developed their role and prepared a copy of the contract at home the day before the trial started. In court, both boys played their roles to the hilt, elaborating on the positions agreed to in advance with their lawyer (one of the investigators) and making appropriate admissions and denials on cross-examination. Thus, it appears that Keith is quite capable of role playing when it is a recognized part of the task or the game. It is when he perceives that he is supposed to come up with correct answers to something that he is not likely to put himself in another person's shoes.

Keith's grasp of the mechanics of the pre-trial conference, jury selection, and examination of witnesses in the court was superior to any other of our subjects, as indicated by the Lawyer Dialogue that followed the mock trial. At the same time, his conception of a trial, like Ronald's, may have had a somewhat different cast from the rational view that we intended to develop. In response to the Lawyer Dialogue statement that Mr. Smith's lawyer thought his client did not get a fair trial, Keith said, "They might be able to bring it up to a higher court. Or try to find evidence." (Cf. Ronald's "spoiled brat" outburst at this point.) Keith was not asked at this point what the basis of an appeal or mistrial might be. Earlier in the interview, however, he had remarked to the child he was tutoring in the role of the lawyer, "We had a court session in our room last week and I lost, but you can't win all the time though." (It will be remembered that Keith had been cast as the defendent in this trial.) One might just dismiss Keith's saying, "You can't win all the time," except that it fits a larger pattern that was observed by one of the experimenters who was with Keith throughout the trial:

> In the trial when I was Keith's lawyer he and I were talking about it and it was quite clear to me that he didn't have the idea that right will out, that it was open and could happen either way. It wasn't even a function of injustice or favoritism, but the kind of thing you hear people say, "You've got to be in the right place at the right time." Pretty much luck, pretty much chance that operated for him as a way of thinking about the world.

These remarks are taken from a general debriefing of each experimenter's observations about the children. The reader may, like the author, wish he had Keith's original remarks, but as was the case with so much of what we observed, we did not appreciate their significance at the time of their occurence. Moreover, as we have been trying to show in a variety of connections, it was not in particular statements so much as in the whole pattern of what our subjects said and did, that their underlying conceptions seemed to show themselves. Now, some months later, the idea of chance or fate, emphasizing factors beyond one's control or prediction as major determinants of how things happen, seems pecculiarly appropriate to Keith's general posture of trying to figure out or accomodate to "the powers that be," especially, we suspect, to what Keith perceives to be somewhat arbitrary or unpredictable authority.

Keith checked "not a very important problem" (the lowest possible rating) in response to the Easton and Hess item asking how important "for America today" the problem of "curing sickness" is. He then commented, spontaneously, "Fate is fate, the Lord will take you whether you have a mechanical heart or not. There's no point in calling sickness a problem for America."

A day later, in our last interview, we tried to check out our hunch about chance by asking Keith and Ronald, separately, what they thought of the statement, "A lot that happens is just fate, and there's nothing people can do about it." Here are the two boys' responses:

Ronald: Fate is like nature, a lot of things have to happen. After you did something, you often say, "Oh, I should have done so and so, or this wouldn't have happened." And, if you had, it wouldn't have!

Keith: Yes, that's true [our generalization]. There's some things people can change, but other things you can't do nothing about. It's hard to think of an example, -- let's see, -- like me riding down the street on a skateboard, I didn't have to ride down this street. So I could've changed that, but that's not it exactly.

We would have no trouble recognizing Keith's statement from its general style. However, the two statements are more difficult to distinguish substantively, unless Ronald's can be said to be more cheerful or to imply more control if one has foresight. Whether or not our hypothesis fails depends on whether or not a conventional saying like the one we used could be expected to elicit differential responses from the children. Obviously, we thought it would.

One last note on fate or chance is our observation that Keith, alone of all our subjects, seemed to imply that chance was one of the factors affecting the pendulum. This occurred when he had observed, contrary to his prediction, that weight made no difference to the period of the pendulum. "But sometimes it might make a difference," he remarked, in a way that did not suggest another discrete variable (something he suggested at a different point in the interview) so much as it implied that if he kept varying the weights themselves, there would sometime be an exception to the results he was getting. This was, to be sure, a strategy to defend his original hypothesis and simultaneously to protect himself against the possibility that the revised conclusion he was now stating to the examiner might be wrong. But is this not precisely the function of the idea of chance? That it should be introduced into a science problem where the variables were specified and subject to control seemed to us particularly significant. When we examine Keith's pendulum performance more directly, several other evidences of his defensiveness will also be noticed. Here we have looked at it only as it relates to his idea of chance, or the unpredictability of events.

In the remainder of this section on Keith's concepts of law and society it will be argued that he seems to have about the same fund of information that Ronald has, but tends to use it quite differently. Keith "knows" as much, or as little, as Ronald about the law, government and politics, Negro-white relations, or Vietnam. However, he generally thinks more systematically, which is to say that he uses concepts to sort things out hierarchically, he checks out or keeps in mind alternative possibilities, and he is openly concerned with consistency. This pattern is complicated by something we have noted before, his different approaches to questions of what *is* and what *would be*. Where norms or ideals are concerned, he seems to handle the latter questions more in terms of what *should* be. Where it is more clearly (to him) a question of the reality or truth of things, he sometimes, again, imposes his ideas of what ought to be, but he more often gives a highly differentiated, qualified response. In all this there seems to be an interaction of Keith's defensiveness and his logical-conceptual development, that is, his analytical powers are his defense up to a certain point and may have been developed to serve this purpose more than, say, to satisfy a curiosity about the world and how it works.

The reader may recall that Keith scored best of all our subjects on the Second Multiple Choice Test, the test which required a subject to rank order different explanations of legal phenomena. On all 8 items he agreed with us as to which explanation was least valid, and on most of the items he agreed with us as to the relative weights of the first two explanations (again, this latter ranking was somewhat arbitrary for some items.) Let us look at two items on which he not only agreed with our ranking but also wrote in some comments of his own:

5. Why is there a need for lawyers in a trial?

1 The lawyer understands the rules of the courts and he can use the rules to present a person's case in the best way possible.

____ The court does not respect an ordinary person, but it listens to a lawyer. [I don't like it.]

2 The lawyer knows more than anyone else what happened in a case before it was brought to court. [I don't like it.]

6. Why do juries disagree?

2 Some jury members might not agree on what people said in the testimony. [I don't like it.]

____ The jury members may not like each other, or may dislike someone testifying in the trial. [I don't like it.]

1 Jury members may not agree as to how the facts told by the witnesses fit the basic principles stated by the judge.

We asked Keith afterwards why he had written "I don't like it" after two of the choices in each of these items. His response was that we had said all of the explanations were true, though of different values, while he thought the ones he rejected were "not true" or at any rate "not good". We might argue with Keith that the last choice in item 5 is not true, or not always true, and we will chalk this up to Keith's analytical precision and his consistent concern with what is true. We would not agree so readily that the other choices Keith rejected are not true, and we are inclined to think another factor entering the picture here is Keith's not recognizing the indicated departures from role norms or ideals. The reader might object that the investigators themselves, by preferring the first explanation to the second in item 6, and perhaps even by their preferring the third to the second in item 5, are undervaluing explanations involving departures from role norms. As we ask ourselves now how to account for the greater congruency of Keith's ratings with ours, as compared with Ronald's and ours, we might recognize both Keith's grasp of hierarchical relationships -- which shows up especially on other items not involving role norms -- and a bias of our own ratings in favor of the "official" explanations.

Keith's first choices in the two items under consideration clearly suggest that he recognizes the explanations which are most appropriate in terms of specificity to the processes of law and generalizability to all the cases implied by the questions. His ability to make these choices depends on his being able to use key concepts to order the material, a capacity which he demonstrated on various occasions in the law instruction. For example, here is Keith's reaction to the same generalization about sanctions that was discussed with Ronald:

Ex-- What do you think of this idea, Keith? "Without ways of making people obey the laws, men could not have justice."

K:-- It's true, if they didn't have ways to make people obey there would be riots everyday and lots of people would be getting hurt. Like in Chicago, people were throwing stones and everything at police officers, so they had to put them in jail.

Ex-- Does this idea apply to how the courts work?

K:-- Yes, they have fines in court. Mr. C. said the best place to hurt a man is in his pocket. For some things jail isn't as good as a $50 fine. You get fined and you'll never do it again.

Ex-- Does this have anything to do with the Eskimo trial?

K:-- Not exactly, but there's some resemblance. With the Eskimos the worst way to hurt a man is to disgrace him, here it's to take his money. In different places there's different ways to hurt somebody.

Ex-- Is that true everywhere?

K:-- Yes.

Keith was not just parroting something we had said here, for we had not discussed this generalization as such and its applicability to the Eskimos in class. We had, obviously, made a comparison of fines and jail, and we had discussed the law's ways of compelling people to appear in and cooperate with the courts, a category of sanctions that Keith, like Ronald, omitted to discuss here (some three months later).

Like Ronald, Keith knew that Congress makes laws for the nation but knew nothing about the Democratic and Republican parties. Also like Ronald, he associated the names of Kennedy and Nixon more readily than Johnson and Goldwater with the election for President, but he knew nothing of the issues they represented. However, as we attempted to talk about the parties and the issues with Keith, he started asking us analytical questions. For instance, we fied things somewhat by suggesting that rich people were more likely to be Republicans and poor people more likely to be Democrats. At this point we had already established that President Johnson was a Democrat and that Keith's father had voted for him, and Keith now asked how this could be when his father was not poor! He thus forced us to complicate and clarify our thinking, a frequent result of talking with Keith.

A dozen times during the administration of the Easton and Hess questionnaire Keith objected that he could not answer a question without knowing more of what it was intended to ask. Thus to an item that asked whether the President cared "a lot," "Some," or "a little" about a letter "you" write to him, Keith remarked it depended on what one writes about. To both of two similar items asking whethe the President and a policeman respectively can "make any one do what he wants," "almost anyone," "many people," etc., Keith said, "I can't answer, because it depends on what he wants them to do." Likewise whether it is easy to get a law changed depends, he noticed, on what the law is. We thought these were all pretty shrewd observations, and we would question the validity of the items to which they were addressed. A number of other instances of Keith's questioning could be cited.

On his reading an Easton and Hess item that asked why people would want the job of President, or Senator, or Mayor, Keith said outloud, "Of course, they want to make a lot of money or be important," one of the choices provided in the item. Nevertheless he checked on the form a different choice, "They want to change things that are not good in the government." This is different from the pattern of his explanations of law phenomena, in that here Keith did in fact recognize a role discrepancy, though he still did not give it as his official answer. Ronald, who was present, checked the alternative Keith has supported aloud -- a little difference which is interesting no matter how one construes it (as his own choice, or the result of Keith's comment, or both).

In answering our questions about policemen Keith used the whole gamut of his ways of talking about role norms and performances. To the one Easton and Hess item that asks what would the policeman do, Keith responded "Would always want to help me if I needed it," (rather than "would almost always," would usually," and so on down to "would not usually.") To the six remaining items about the policeman "as he really is," all worded in the present indicative, Keith responded with much more reserve or caution. He chose the fourth alternative out of six available (the first being the most positive) on a friendliness continuum, and the fourth on a continuum concerned with how much the policeman is "my favorite." He said the policeman makes important decisions "sometimes," a more realistic choice than Ronald's "all the time." He said he could not answer two of the items, concerned with how much the policeman knows and how often he keeps his promises, because it depends on which policeman and what knowledge or promises one is talking about. And, as we noted before, he said he could not answer the question about the policeman's ability to make people do what he wants because it depends on what he is trying to make the people do.

When we asked Keith to tell us a story about a policeman, he asked us whethe it should be a true story or one he made up. We said either would interest us, and he elected to make one up. (This surprised us at first, given our judgment that Keith was less inclined to fantasy than Ronald, who had told us a true story at this point. However, fiction was what we really had in mind, as the word "story" may indicate, and Keith managed once more to be more conforming.) Keith' story was a long cops and robbers affair in which the hero was an Officer Muldoon We then asked Keith if he had anything to relate about policemen he knew or policemen in his neighborhood. A friend of his father, he replied, was a policeman and "broke up riots." Only a few weeks before, he went on, he and his family returned one day from a fishing weekend at the Cape to find policemen "at every corner in the neighborhood." There had been a rumor (we had heard it too) that a riot would break out in town that day, but with the policemen there "everything was quiet." We asked if he knew what the riot was supposed to be about and he said, "No, the TV didn't work at the Cape, so we didn't hear the news."

In fact, the rumor of a riot had spread at a time when rioting had recently occurred in the Negro ghettoes of a number of northern cities, and it was in this context that we asked both Ronald and Keith what they thought had caused the rioting in Chicago and Cleveland. Whereas Ronald had ascribed it to drinking, Keith said simply, "I don't know." Thinking either that Keith really felt he did not know, or that he did not want to discuss this with a white, the examiner made some comments of his own about the Negroes' bad housing and unemployment in the riot areas, and their more general anger and resentment over unfair treatment. Keith seemed quite interested, but responded simply,

> My Aunt told me Martin Luther King got hit by a rock in Chicago, he came back to Boston, and now he's going back to Chicago. Does he think he's invincible? Why would he do that?

We replied that we thought King was standing up for the Negro's rights and trying to lead the Negroes. The next day Keith remarked,

> You know what we were talking about yesterday, -- I can't understand what they have against us. We're no different from them except in color. I just can't understand it.

Once in class when we were reading together a book. Let's Go To Court, a number of the children reacted with giggles and comments we could not hear when they saw a picture that showed a Negro being sworn into a jury. We asked the children what they thought of the picture, and some replied, "It's funny," or "It's wrong," while others said it was the first time they had seen a picture of a Negro in a school book. Keith then exclaimed,

> I know what's wrong! This man has black hands, the palms of his hands

> are black, but the palms of a Negro's hands are not black. They're light, like mine, see [holding up his hands]? I knew something was wrong! Whoever drew this doesn't know Negroes.

We ourselves had felt something was funny about the picture, but until Keith identified what it was we could not put our finger on it. In addition to this sharpness, though, we were struck by the boldness of Keith's speaking up, both in what he said and his tone of voice. We have presumed that there have been very few, if indeed any occasions in the lives of Keith and his classmates, in school or out, when they have talked about race and skin color with a white. This in fact was the feeling or information conveyed most strongly to us when the picture of a Negro in a schoolbook caused such a commotion among the children. Keith was clearly more outspoken here, in his analytical way, just as Ronald was in his way when the occasion called for expressing a white person's attitude toward a Negro.

From all of our emphasis on Keith's listening for right answers the reader might have concluded that Keith is insecure. In due time we will argue this ourselves in a certain way, but let us point out here that Keith's outward manner -- his voice and carriage, his asking his questions without having to be invited to do so, his easy laughter with us at times when we ourselves want to laugh, all suggest a very confident and sometimes aggressive boy. One feels about Keith that he has figured out "the system" up to a certain point and is going to make it work. Likewise, one feels that he has figured out whites and blacks, in the sense that he knows, at least objectively, that whites are not superior, and in that he is proud of himself for what he is. We cannot say any of these things about Ronald, and thus it is especially poignant that Keith would have said -- indeed the point is that only Keith would have said, -- "I just can't understand what they have against us."

Keith's saying he did not know why Negroes had been rioting in the cities may, again, have reflected partly his not wanting to discuss it with us. We would have to guess, however, that there would be different limitations to his understanding from those that seem to confine Ronald. Keith could grasp better the systematic interplay of bad housing, unemployment, and so on, indeed he seeme to be taking this in as we suggested it to him, despite his responding in terms of Martin Luther King. On the other hand, Keith would bring less empathy and feeling for the rights of the situation, as in fact he did in his comment on

King. (One might interpret in the same way Ronald's saying the rioters were drunk, but it remains our opinion that he could more readily be brought to sympathize with them.) It will be recalled that Keith assigned the lowest priority to the Easton and Hess item asking how unemployment rates as a national problem. His spontaneous remark at the time was, "People are just hurting themselves when they're out of work." The house in which his family occupies the second floor is owned by his aunt, and, as with Ronald's family, both Keith's parents have steady jobs, the father as a bus driver and the mother as an IBM key puncher. The economic situations of the two families are thus fairly comparable, and one traces at least a fraction of the difference in the children's estimation of unemployment to their separate ways of thinking about people.

We asked Keith too about the war in Vietnam:

K:-- There's a war and people are trying to take over the world, -- Europe, the United States, the world. Then the Russians and the Chinese, I forget the name, the communists [Chinese communists] will fight over who's going to have which part. They're so greedy, the whole world might be destroyed.

Ex-- What do you think the war means to different people who are in it? What do they think of the war?

K:-- Like the army men?

Ex-- Yes, --

K:-- They would try to do their best. The people don't want it in their part, because the country would be all blown up and everything. The other side would try to win as best they can, so they could take over.

Ex-- Tell me more about the people in the villages.

K:-- Probably they're hoping that the war will soon be over.

Ex-- How do you think it might end?

K:-- Either Vietnam, -- the communists, -- or the United States will give up

Ex-- Suppose people want the war to end before then, is there anything they can do?

K:-- I don't know. They couldn't do anything. Either the United States or Vietnam has to give up.

Keith's opening statement about the take-over of the world sounds very much like Ronald's. In subsequent parts, however, one hears Keith more clearly. He asks us a question to determine what we want to know, and he responds in terms of several subsets of the category we asked about -- the army men (presumably ours), the people, and the other side. Except for the one image of things blowing up, his picture of what people would think of the war is considerably less vivid and personal than Ronald's, and even becomes tentative with his use of the term "probably". He does not imagine a solution outside the only official one he seems to know about, but at the same time his not fantasying a solution at this point suggest a greater concern with reality. Finally, his saying simply, "I don't know," distinguishes Keith from Ronald, who almost never recognized or admitted the limits of his knowledge (remember Ronald's saying how he had been afraid not to answer in school). It was Keith's keen sense of the limits, both of his knowledge and of the statements he made within it, that gave one the greatest feeling of power in his thinking.

The style and development of Keith's thinking.

We have had much to say about this already, not only because of the comparison with Ronald, but because it has been impossible to talk about the substance of Keith's thought without discussing his style. It is especially in this section of the writeup that we shall be briefer.

i. Categorizing. Keith scored 125 [MA 15/9, CA 12/2] on the Stanford-Binet Intelligence Test administered by us near the end of the instruction. The examiner, the same who administered the test to Ronald, commented at the time:

> Intelligent, alert, concerned -- eager to grapple with ideas, refusing to let go of them until he has made a major effort to solve them. Can deal with abstract ideas, mathematical relations, can plan, generalize, and deal with imaginary or hypothesized situations. Does not pretend to knowledge he does not have, nor does he hesitate to admit failure.

It is one of the quirks of writing up such a complicated tangle of data that we have just now noticed for the first time the Stanford-Binet examiner's comment on Keith's not "pretending" to knowledge, after our having arrived at this conclusion, or a certain version of it, in the previous section. As in Ronald's case, the examiner's immediate impression of Keith provides a valuable set of clues which take on more specialized meaning as one comes to know the subject more intimately.

We have introduced the Stanford-Binet scores under the heading of categorizing because of our intuitive hunch at this point that control of hierarchical models of categories and levels of generality or abstractness, rather than sheer vocabulary attainment, is the most central factor in conventionally defined intelligence at Keith's and Ronald's age. At the least, it is the major discriminant in the intelligence performances of these two particular boys. That it is Keith's forte is suggested particularly by his performance at the Superior Adult I level, where he passed the enclosed box problem and the essential similarities items, but failed the vocabulary, sentence completion, repeating reversed digits, and sentence building items. (Ronald did not reach this level.) At the lower levels Keith completed successfully all the items calling for control of abstractions, except, interestingly, the differences between abstract words and the essential differences items, two similar types of task at the Average Adult level.

Keith's consistent categorizing with the Society Cards, and his relatively high performance on the Abstract Categorizing Test we have already noticed. Finally, we have observed on a number of occasions how Keith used concepts to order material he was discussing, for instance the several sets of persons he identified in the Vietnamese war, and how he seemed to be alert to the level of abstraction (specific fact, general rule, etc.) that was called for at a given time in discussion.

ii. Generalizations. Keith's concern with the truth of generalizations and our conclusion that he took them more than Ronald did as models of reality ("It ought to apply,") has already been noted. His generalization, "In different places there's different ways to hurt someone," served the function of explaining or at least relating variable phenomena, and was the only such statement offered spontaneously by any of our subjects, though various generalizations were elicited from them more deliberately.

Here is our discussion with Keith of the generalization which prompted Ronald to imagine the United States' invading Mexico and Cuba:

Ex-- What do you think of this idea? "Whenever one country is stronger than another, the stronger country will try to dominate the weaker one."

K:-- Dominate?

Ex-- Do you know what that means?

K:-- No.

Ex-- To try to influence, to control, to run....

K:-- To run the country?

Ex-- It doesn't just mean run, though, like you could dominate Ronald or he could dominate you.

OK, now, what do you think of the idea?

K:-- Like Turkey, -- let me see, ah, -- Czechoslovakia and things like that, sidelights, something like that, around Russia. What's the word, sidelights?

Ex-- I got you, satellites.

K:-- Satellites! And....

Ex-- What do you mean, "things like that"?

K:-- Russia rules those countries, Russia's stronger and it rules the satellite countries.

Ex-- So that's an example.

K:-- Yes.

Ex-- So, now what do you think of the idea, "Whenever one country is stronger than another, the stronger will try to dominate the weaker ones?"

K:-- That's not true all the time.

Ex-- What's an example of it's not being true?

K:-- Let me see. Like I'll say the United States. The United States is a pretty strong country, but it's not going over into Europe and things like that and putting those countries under their rule. Like they don't go having a war just because they want that land. Like they'd try to buy land or something like that.

Ex-- Uhm. You'd be surprised that some people in Europe do think the United States is trying to dominate them. Can you imagine what their argument is, why they think the United States is trying to dominate them?

K:-- Because -- I don't know. I really don't know.

Ex-- Well, what could it mean, even though you don't know the facts? What could you guess? [Pause] Now you said that the United States isn't trying by military force to take their lands and you're right about that. Could there be any other way to dominate?

K:-- Buy up the countries?

Ex-- Yeah, that's a good idea. Not buying a whole country, but....

K:-- Industry.

Ex-- Any other way?

K:-- Products?

Ex-- Yes, uh -- maybe they'd like to have the United States buy their products but selling our products there and beating them out in their own markets. Like selling cars, we could try to dominate the car market.

K:-- But that wouldn't be true, because the American cars are too big for Europe, the gas there is so expensive, and things like that.

[An airplane goes overhead.]

The United States might buy land around the European countries and make airports out of it. The Europeans might not like that, they might say soon all the land would belong to the United States.

Ex-- Yes, or some Europeans might be unhappy about our planes being there even if we only rented the land.

This discussion illustrates once again the precision that Keith requires, at the same time that he is quite willing to entertain a generalization. As we have become aware of this, we have wondered what difference our realizing it would have made at the time of the Lumberyard interview. To put it differently, how do we account for the more satisfactory rapport and exchange between the examiner (on both occasions, the author) and Keith in this interview conducted in one of our last sessions with Keith, as compared with the interview of several months before? We think it is due partly to our greater awareness of and respect for Keith's manner of thinking, his questioning and listening for all the information he can get. Perhaps too, however, our discussing together the truth of a generalization presents quite a different situation from our discussing a particular legal or moral problem. We shall see how with a different person as examiner Keith seemed again to be trying to adapt his stance to what he thought was the examiner's at different points in the Kohlberg Moral Dilemmas. It seems to us that the question of the truth of a generalization might be a more objective matter for Keith, one which he knows the rules for and which therefore is more independent of the examiner's knowledge or opinion than is a question of moral judgment. With Ronald we had a somewhat opposite feeling. He was going to make a generalization work somehow, because we were asking him to, but it was not his game as much as the discussion of a moral problem.

It should be noticed how effectively Keith uses a hierarchy of concepts -- dominate > buy up a country > buy industries, products and land -- to converge on the possible meaning of dominate in this discussion.

iii. Creativity. We have presented our evidence for thinking Keith is considerably less creative than Ronald, in the sense of his producing fewer examples of or associations to various stimuli, and his not elaborating as much as Ronald on the contextual ramifications of things we were discussing. This does not mean that Keith is inhibited from introducing any examples from his own knowledge or experience, but that they tend to serve a more convergent purpose. Thus his excellent example of Russia's relationship to her satellite nations (Turkey aside) served to pin down the meaning of "dominate" in terms that were consistent with what he already knew, but it was more difficult -- though the problem yielded -- to imagine an example that seemed to contradict his usual way of thinking, in this case about the United States.

Our experience in subsequent research (1966-67) with 7th grade children's responding to the Wallach and Kogan items leads us to think that Keith is not remarkably uncreative, but closer to the average for his age. However, his Wallach and Kogan performance did have certain characteristics that marked it as distinctly Keith's. We have commented before on how he converted it to a more conventional testing situation by calling time on himself. This suggests that his producing fewer instances than Ronald was not simply a question of lesser imagination or capacity to change set, but also a matter of lower tolerance or enjoyment of this activity. Another way in which Keith impressed himself on the task was his saying "I don't know" at various points where in fact he was not expected to know but had been asked for an imaginative response. More than once when he was examining the Pattern Meanings stimulus cards he said, "I don't know what it is when I hold it this way," instead of the "I can't think of something this way" that would be more appropriate and is the type of response generally offered when a subject is stuck. This attitude of Keith's was noticeable also in the Moral Dilemmas interview, where our intention was to ask for his opinion rather than for what he knew. Thus,

Ex-- What should his father do when Joe gets back from camp?

K:-- I don't know.

Ex-- Well, what do you think?

K:-- I hope 'cause he broke the law, I guess, I guess he'll talk, he'll talk to him.

A little tactic that Keith employed several times in our working with him was his making a very specific guess at an answer to a question that, in our view at least, called for a broader or more general response. On the pretest of the Pendulum Problem Keith completed the statement, "I could make a pendulum that makes the greatest number of round trips in 15 seconds ....," with the following response: "by putting a 1/2 oz. weight on a 7" string." Since no specific weights or lengths had even been mentioned in the demonstration, this seemed like quite an arbitrary and narrow stab at an answer. Somewhat similarly, when he was asked in the conclusion of the Moral Dilemmas interview whether he thought there were right answers to the questions that had been put to him, Keith said, "Yes," and then, "About three-quarters," when the examiner asked him how many had right answers.

The evidence points to Keith's being especially convergent in his thinking, in the whole variety of tasks in which we engaged him. This lends some weight to the examiner's feeling at the very outset of the Lumberyard Interview (Stmts. 1-10) that Keith was closing in quite quickly on the "right answer" to the problem, after very superficially checking out what the examiner's view of the case seemed to be.

iv. Scientific problem solving. How does one expect Keith to perform on the pendulum problem? On the one hand, his questioning, analytical, convergent style of thinking should lead to his pursuing the experiments quite critically, indeed to his solving the problem. On the other hand, we have suggested that there is some question with Keith of who has the truth, and that his behavior varies as a function of his perceiving that the truth lies in one source or another. (Perhaps this is a question for everyone, but it is especially prominent, or at least we have noticed it first, in Keith's performances.)

In fact, Keith's performance on the written pendulum posttest was almost flawless. Unlike most of the subjects (including Ronald in one instance) he did not revert to hypotheses that the data had not confirmed, and he consistently asserted that only the length of the pendulum made a difference in its period. At the same time, there was something rather special in his answers to the questions that concerned factors that did not make a difference. All of these questions took the form, "If you do X [give the pendulum a push, add a weight, etc.] the pendulum will make (MORE) (FEWER) (SAME) number of round trips in 15 seconds because...." Instead of stating compensatory relationships of amplitude and speed etc., as the other subjects tried to do, in response to the term 'because' in each of these questions, Keith answered, "I tried it," "It's my theory," and finally, in response to the last question, "I proved my theory." We hear in these statements a strong note of self-assertion, almost of triumph, at the same time that Keith ducked the questions for which the experiments did not provide definitive answers.

When we look at the performances that preceded the posttest, the four occasions on which the variables of the pendulum were manipulated one at a time, we see that Keith was unusually self-conscious again, but in a different sense. Here he was highly defensive. In the first place, he protected his hypotheses somewhat more than any of our other subjects, by miscounting the roundtrips of the pendulum and by inventing a special case in which a hypothesis would be covered even though the data of the experiments contradicted it, ("If the string was a chain, the weight of the pendulum would matter.") Secondly, when Keith was uncertain he was considerately more cautious than the other subjects. Thus to a question asking him to predict what would happen, he answered, " - a little bit, I guess it might, I'm not sure, so I'm not going to say nothing." At another point, when he was asked what difference the length of the string made, he said first, "I guess it would go faster, the shorter string;" the examiner, responding to Keith's tone of voice and the phrase, "I guess," asked, "Are you sure?" and Keith replied, "No, I wasn't watching for that," even though in fact it was agreed that we were watching for this from the outset. Again, when he had concluded an experiment varying the angle of the pendulum and had gotten the same results each time, he was asked what difference the angle makes; "I guess none," he replied, "or it might be my nerves, like my pulse, that might give it an extra push." Keith was hedging here, much in the manner of the junior scientists described by Holt in How Children Fail (1964).

All in all, it looks like the pendulum problem was a struggle for Keith, in which, as we have observed on a different occasion, his logical and conceptual abilities turned out to be his strongest defense. By his not attempting on the posttest to explain why weight, amplitude and push did not make a difference (though he did invoke the concept of "power" in a general way to explain these things during the experiments,) Keith proved to be less venturesome in his explanations. On the other hand, it is this very restraint of self-consciousness that gives perspective to Keith's thinking. As he said at one point in the experiment "I can't give it the exact same push, of course, because I'm only human."

v. Defensiveness, anxiety, and moral judgment. With regard to defensiveness and anxiety, we can do little more here than to reiterate our impressions formed at various points earlier, that Keith showed little anxiety in the test or school situation, indeed that he thrived in it, but that he was at the same time quite defensive, on guard, one might say, that he not be apprehended in a falsehood.

Especially if the reader is uncomfortable with Wallach and Kogan's distinction between defensiveness and anxiety, our characterization of Keith may be hard to imagine. Let us first quote one of our investigators, the same whom we have already quoted on Keith's attitude during the mock trial, this time commenting on his overall impression of Keith. We shall then quote Keith himself, from the Moral Dilemmas interview. Charbonnet said the following:

> It was easier to get Keith to do interviews just in the crudest sort of ways, in the grossest kind of way, because he would talk, because he was smoother in a lot of ways than the others. The reason I mentioned Keith so much in here is because I tend to gauge the others by Keith somewhat. That may not be a good technique, but it's what happened without my being conscious of it. Keith from the beginning stood out in my mind and I guess that's partially due to the fact that he's generally more outspoken, more verbal and he's just got that line; he's got a certain quality about him. I'm sure Keith could go to any school and do well and fit right in with any group. He just gives me the feeling he can handle the situation.
>
> Keith is quick to bring up what's in his mind. If he's got an idea or is involved with something, he wants you to know about it. And he wants you to know about the ideas he thinks you'll approve of. I see Keith as much more motivated than the others to succeed in the world, to do well, to be recognized, to be well thought of. It's sort of a good boy kind of thing and I expect Keith to be higher on the moral dilemma thing than the others. He'd be on Level II just because of that kind of observation. Just the way that scale is set up, he talks more and that's going to tend to set him up higher.

That Keith did not perform at Level II in the Moral Dilemma interview, but in fact got one of the lowest scores of all our subjects, is all the more intriguing in view of Charbonnet's essentially correct observations that Keith has a good boy orientation and that the Kohlberg test is biased in favor of the more verbal subject. Keith's concern to be a good boy is, we think, conditioned by an underlying concern to avoid punishment or censorship and his verbalness and smoothness seems to have served, at least at some stages of his life, to protect him from the hazards of being wrong. These factors seem to have been operative in Keith's Moral Dilemmas interview, with the result that he gravitated toward Type 1, Level I behavior. In the dialogue that follows, notice that Keith's "verbalness", as we are calling it, is not the same as Ronald's verbal fluency. Keith uses many words, but often, at least in this Moral Dilemmas interview, to dance around a difficult point, rather than to elaborate on an idea as Ronald tended to do.

Ex-- O.K. uh, Keith, the first situation here is this: Joe, a boy named Joe, was fourteen years old and he wanted to go to camp very much. His father had promised him that he could go if he saved up enough money for himself, and so he worked very hard at his paper route, and saved up the forty dollars it cost to go, and a little bit more besides. See? But just before camp was going to start, his father changed his mind about letting him go. His father's friends had decided to go on a special fishing trip, and Joe's father was short the money that it would cost him to go with them, and so he told Joe to give him the money that he saved up from the paper route. Joe didn't want to give up the money, uh, or to, he didn't want to give up going to camp, and so he thought of refusing to give his father the money. O.K.?

K:-- Yeah, I get it.

Ex-- Now the first question I'd like to ask you is: should Joe refuse to give his father the money, or should he give it to him?

K:-- He should give it to him, 'cause it's his father.

Ex-- He should give it to him, because it's his father. Uh, why should he give it to him, just because it's his father?

K:-- Because his father is his father. His father gave him more money than forty dollars, for as long as he was living, 'cause with all the food and everything.

Ex-- I see. I see what you mean. Uh, O.K. let me ask you this, then. Would a loyal son have to learn, have to loan his father the money, or is it up to Joe, in other words, does Joe have a right to refuse?

K:-- Not really.

Ex-- O.K. Not really. Let me ask this then. Does his father have the right to tell Joe to give him the money?

K:-- I, uh, uh, like if Joe's father had to go, like if it was a business, yeah, it, uh, probably.

Ex-- How about in this situation?

K:-- Uh, Uh, I don't think my father would tell me to give him the money.

Ex-- Would a good father have asked for the money like that? You have to answer out loud, because of the tape recorder.

K:-- No.

Ex-- What would be the best reason for Joe to refuse?

K:-- Because uh, Joe wanted to go to camp, and his father told him to save up the money, so Joe saved it up, and then his father told him he can't go.

Ex-- I see. O.K. Um. Let me go on with a little more about the story. Joe wanted to go to camp, but he was afraid to outright refuse to give his father the money, so he gave his father ten dollars and told him that was all he had made. He took the other forty he had made, and paid for the camp with it. Then he told his father that the head of the camp said he could go then and pay for it later, when he had earned more money. So he went off to camp, but his father didn't have enough money to go on his fishing trip with only the ten dollars. Got that? Is that pretty clear? Did Joe do wrong in doing what, that, or was he justified in doing that under the circumstances?

K:-- He was doing wrong.

Ex-- He was doing wrong. O.K. Let's see. Let me ask this. Joe's father broke his promise about letting Joe go to camp. Was that wrong, or was it all right under the circumstances?

K:-- It was wrong!

Ex-- O.K. Which is worse: a son breaking a promise to his father, or a father breaking a promise to his son?

K:-- I guess a father breaking his promise to the son.

Ex-- Why do you think that?

K:-- Because, uh, if his son won't break his promise to him.... I don't really know but, uh, I think it's worse for it the father breaking the promise.

Ex-- O.K. Why shouldn't someone break a promise anyhow?

K:-- Because they gave their word.

Ex-- 'Cause they gave their word. O.K. Later Joe's father found out that Joe had lied to him about the money. What should his father do when Joe gets back from camp?

K:-- I don't know.

Ex-- What do you think?

K:-- I hope 'cause he broke the law, I guess, I guess, he'll talk, he'll talk to him.

Ex-- Talk to him, I see. Should he be punished; should he punish Joe for lying?

K:-- It matters what kind of boy Joe is.

Ex-- I see, depends on the kind of boy Joe is. What would you do if you were Joe's father?

K:-- I, I'd talk to him, but I wouldn't punish him, because I broke my word too.

Ex-- O.K., I see. Would the punishment do Joe good when his father had broken his promise in the first place, if he did punish him?

K:-- It, uh, I don't think so.

Ex-- O.K. Let me go on to another situation. Before Joe went to camp -- this is more about the same guy -- before Joe went to camp, he told his older brother, Alexander, how he really made fifty dollars and how he had lied about it to their father. Alexander wonders if he should tell his father or not. If he does tell, his father will be angry and will punish Joe. If Alexander doen't tell, his father may never know about it. Is that clear?

K:-- Yeah.

Ex-- All right. Should Alexander tell his father that Joe lied about the money, or should he keep it quiet that Joe has told him?

K:-- Well, if uh, if, if Joe, if Joe did, if uh, like uh, you know like some, like if they have brothers, you know how some brothers don't like each other, you know, they really like 'em, but you know.

Ex-- Yeah.

K:-- They try to hurt each other, well, if they was them kind of brothers, I guess he would tell.

Ex-- O.K. Do you think he should tell?

K:-- If his father doesn't ask him?

Ex-- If his father doesn't ask him, then he should, or he shouldn't?

K:-- He shouldn't.

Ex-- He should not? Am I reading you right?

K:-- Yeah.

Ex-- O.K. Would it be wrong for Alex to tell, or is it up to how he feels?

K:-- I guess it's up to how he feels.

Ex-- I see. Why would he think he should tell?

K:-- Because uh, because he wouldn't want, he uh, his father, because of his father? He didn't want, you know, he wants, I don't know really. I guess because, you know, how, uh, uh, he wouldn't want his brother to get in more trouble than he was already in.

Ex-- I see. What would you think of Alex if he told?

K:-- He thinks it was terrible.

Ex-- Would Alex be a bad or disloyal brother for telling?

K:-- Yes.

Ex-- Would it be Alex's fault if Joe got punished?

K:-- Uh, Yes! If he told.

Ex-- O.K. It would be Alex's fault, in your opinion?

K:-- Yes.

Ex-- O.K. Would Alex be a loyal son if he kept quiet?

K:-- No.

Ex-- He wouldn't be. O.K. All right. Which is more important: being a loyal son or a loyal brother?

K:-- I guess a loyal son.

Ex-- Suppose their father actually asked Alex whether Joe had lied about how much money he had earned. Should Alex tell his father the truth, or should he get out of answering?

K:-- Like how, get out of answering? Like what do you do, walk away, or something like that?

Ex-- I don't know how he would do it, but... what do you think he should try to do, get out of it. or come across with the story?

K:-- Try to get out of it, at first.

Ex-- O.K. Uh. Let me go on to a different kind of story, Keith. Pass the tape over there, O.K.?

K:-- If it's on me, it doesn't bother me a bit.

In both of the dilemmas discussed above (whether or not the son should give his father the money he had earned, and whether or not the son's brother should tell his father what has happened), and in the two other dilemmas discussed in this interview (whether or not a man should steal an expensive drug to save his wife's life, and whether or not a man should abandon his post in an emergency to go look for his family), Keith initially took the opposite position from Ronald's, deciding each time that the choice should/or would be made on the side of authority At almost no point did Keith seem to be concerned with the necessity of maintaining authority, but rather he seemed chiefly intent on conforming to it. He did not actually speak of punishments that might be avoided by this conformity, but in all other respects -- his seeming to have no sense of the injustices involved in the dilemmas, his poorly developed notions of the role of a son, a father, a brother, a husband or a head of a family, and his barely formulated rules or injunctions for behavior -- in these respects, Keith's moral judgment seems to be at Level I, and more specifically in Type 1. On the basis of Kohlberg's Global Rating Scheme, Keith's four discussions were rated respectively, 1/4, 1/2, 1, 1 yielding a score of 140. The coding of individual statements yielded a score of 208, the result of the following distribution of codable statements:

Types	1	2	3	4	5	6
	3	6	2	1	0	0

Keith's producing the most codable statements in Type 2, representing a naively egoistic orientation, reflects in part his response to the examiner's pressing him on his original positions. Almost invariably, Keith switched to the side that seemed to be implied in the examiner's questions, and his rationalizations of it resulted in Type 2 statements. An example of this is the sequence where Keith begins by saying the son does not have the right to refuse his father's asking for the son's money, and ends up saying a reason for refusing it would be "Because uh, Joe wanted to go to camp, and his father told him to save up the money, so Joe saved it up, and then his father told him he can't go." The main thrust of this statement is Joe's frustration or disappointment. It does contain, however, as do other statements in the interview, a hint of higher level expectations, of how an authority should act or even how a contract should be honored. Though it is very hard to predict exactly how Keith's moral judgment will develop in the future, some form of reorganization on Level II can be expected next.

We have spoken generally of Keith as switching easily, almost in a mode of "tuning in" to the examiner, when the pressure was low to moderate, and of his occasionally getting his back up when the pressure was high. A clear example of this occurs toward the end of the quotation from the Moral Dilemmas interview, where Keith had been led back and forth across the question of the brother's telling and then was asked pointblank to make the decision to tell or not to tell. Keith's reply, "Like how [could he] get out of answering?", was almost indignant in tone, and practically implied that the examiner was asking an impossible question. A moment later, however, Keith made a casual comment about the tape recorder wire, "If it's on me, it doesn't bother me a bit." It is in nuances like these that we think we notice Keith's combination of high defensiveness and low anxiety in the testing situation.

In discussing Keith's family life we will suggest that a continuing struggle or ambivalence about who has authority in the family seems to be a major determinant of the development of Keith's moral judgment and of his outlook on things more generally. Here let us take notice of the fact that Keith appears to be a contender for leadership among children his own age. Ronald and Keith both recalled Keith's effort two years ago to organize a club of boys to rival another club. The club apparently disbanded after a short while. Keith appeared to us, from casual observations, to be well integrated into both his class and a neighborhood play gang, but he seemed to be in and out of leadership roles at different times. We regret that we did not construct a sociogram to give more definite evidence of this. Kohlberg (1958) has demonstrated that sociometric standing correlates positively with moral development. He predicted this relationship from the argument that one learns some of the attitudes and expectations of others in society toward oneself by participating in friendship groups. Since Keith seems to be better knit into his peer society than Ronald, while his moral judgment seems to be less developed, the differential contributions of the two families to the boys' development is underlined.

vi. Reflectiveness. We have argued that Keith is more reflective than Ronald in the narrowest sense of the term, his waiting longer before answering our questions. To this we might now add his own questionning and his greater preoccupation with the truth of things. Again, however, Keith appears to be less disposed to look at matters from the standpoint of other persons, and he seems to have less capacity to change set (another way of interpreting the Wallach and Kogan performance). Thus Keith's reflectiveness has definite limitations.

Keith's Family and School History.

Keith lives with his mother and father and a sister less than one year younge than he, who in fact was in the same class with Keith this year at school. The first two times that we came to Keith's house to interview him, we were not admitted to the family's apartment, but waited outside, where we also conducted our interviews with him. The third time we interviewed Keith in his bedroom and, at our request, later met his parents together in the living room. The apartment is somewhat larger than Ronald's, and is furnished in a more middle class way. Keith's bedroom has a handsome maple doubledecker bunk bed, the extra bunk being for a friend or Keith's cousin, who often visits overnight. In the living room a modern couch and arty lamps set the tone of a more style minded family than Ronald's.

Mr. M., Keith's father, finished high school, while Mrs. M. started, but did not finish, in a state teachers college. Keith told us that his aunt went to college, and that she and his mother expecially were always urging him to read and insisted that he get a reading tutor at the 'Y'. Keith indeed had just started his reading tutorial in the summer that we were talking with him.

Keith said his father wanted him to go to college and "made" him choose the academic program that he was about to enter in the 7th grade. Several times during the summer Keith told us he did not know yet which school he would attend in the fall, because his father had not yet made up his mind about it. This was not merely in response to our own questions, but a matter of ongoing interest, which Keith broached himself at the outset of one interview by saying, "Well, I still don't know where I'm going to go to school." Keith said his father was not sure whether the junior high school closest to home was the best one available. Since the children in Keith's city are theoretically allowed to enroll in any school in which seats are vacant at the time of one's application, his father was considering more than one alternative. In fact, Keith was entered in a different school from the one nearest him, in September 1966, and then a month later transferred to still another junior high school a considerable distance from his home. This last school, unlike Ronald's, is racially balanced, and it has had a higher reputation for scholarship.

Keith's father was a taxi driver when Keith entered kindergarten, and, as we have indicated previously, he is now a bus driver in the city transit system. He was wearing Bermuda shorts the day we met him, and he seemed more relaxed and casual, though at the same time somewhat less friendly than Ronald's father had been when we met him. Keith's mother, who is, again, a key puncher at IBM, seemed less at ease with us than her husband, but nonetheless joined in with him on equal terms in their discussion of Keith.

We had only a few minutes with Keith's parents that we can go on here, so we must presume, even more than we did in discussing Ronald's family, that our immediate impression tells us something valuable. Mr. and Mrs. M. dwelt most on a certain struggle with their son. Keith, they said, never sticks at anything, though he is forever demanding the wherewithall to do things -- musical instruments, sports equipment, and so on. With a mixture of pride and pique, they observed (as we had ourselves) that the possessions stocked in Keith's room were testimony to his ability to get what he wanted. He always stays out a little later than he is supposed to, and has to be urged, and sometimes punished, to get him to do what he is supposed to do, for example to clean up his room. Keith is "lazy", they said. Again with a certain mixture of feelings, Mr. M. observed that, like himself, his son does not read much, but watches television "all the time".

Both parents responded emphatically, "Was he ever!", when we asked how independent Keith had been as a small child. Mrs. M. said he was toilet trained quite early, at 14 months, because of her need to concentrate her baby tending efforts on his younger sister. He was able to fend for himself at an early age, but he was at the same time a very demanding child, they both said.

Keith's worst year in school, they thought, was the third grade, when his mother took a job and Keith "rebelled". The fifth grade was Keith's best year, but the sixth grade, the year just completed, had been relatively unsuccessful again, for reasons which they did not understand. Keith's laziness, they felt, had been a factor. When we asked if they thought the school itself was doing a good job, they replied yes and commented on the favorable pupil-teacher ratio in the school that year, the result of a number of families having withdrawn their children to send them to racially mixed schools. Mr. M. remarked that Keith was obviously learning more in school than he had learned, a comment that seemed intended to say more about himself than about either his son or the schools as such. That Mr. and Mrs. M. might not have been revealing their full thoughts about the schools to the interviewer seems apparent from the fact that they did not discuss their indecision at that time about what school Keith should enter in the fall.

Mr. and Mrs. M. volunteered that they wanted Keith to go to college. However they said they had no specific ideas at that time about where he would go or what he might study to be. Maybe Keith would become a doctor or a lawyer, they said.

It seems to us, as we look at the family in relation to Keith as we know him, that there may have been a struggle between the parents themselves as much as between Keith and the parents together. It could have taken a variety of specific forms, but in any of them we would expect to find Keith's father encouraging his son with the one hand to be like himself, while with the other he goads him, and punishes him, to induce Keith to strive for something better. The mother, we think, has pushed on the latter side especially, and probably has been as critical of her husband as she is of Keith. She too, however, would be ambivalent about this, for she must admire her husband's easygoing attractiveness, which Keith himself seems to have inherited from his father, both in his good looks and in his manners.

Another slant on the situation, which does not say quite the same thing, is that Keith's parents seem to have encouraged and taken pride in his independence and his making demands, and simultaneously to have brought him into line or laid down the law at times when, in his father's own words, Keith seemed to be "going too far." If these limits were, as we suspect, not very consistent, or if they varied as much according to the parents' convenience as according to principle, then we could readily imagine the connection to Keith's present thinking.

More generally, it seems to us that the question, who has the truth, or who is the authority, may have been as central to Keith's life at home as it is to all his thinking. We realize that we are interpreting the family in terms of our idea of Keith as much as we are reasoning the other way around here. However, we did not go to either Keith's or Ronald's home with this sort of pattern in mind, but rather in a search for information about much more specific or discrete happenings in the children's lives. The patterns have impressed themselves on us precisely as the bits of information individually did not seem to be very significant or even unique. One such bit was Keith's and Ronald's different responses to an Easton and Hess item that asked,

Who is the boss in your family? [Choose one]

1. ☐ Both fairly equal but father more.
2. ☐ Both fairly equal but mother more.
3. ☐ Both fairly equal.
4. ☐ I can not answer.

To this item Ronald responded, "Both fairly equal but father more," while Keith responded, "I can not answer." Though we did not know what to make of it at the time, Keith's response now seems like a peculiarly appropriate statement of a major question he has about his family and himself.

As we did with Ronald, we turn last to Keith's record in school. His marks are recorded in Table V and his reading scores on various standardized tests are shown in Table VI. Table IV, it will be recalled, gave California Achievement Test scores for both Ronald and Keith.

[Insert Tables V and VI here.]

Perhaps the most striking thing about Keith's "permanent record" in school is that almost nothing is striking about it. In the marks themselves Grade V does stand out, as Keith's parents had indicated, and as it did to a lesser extent for Ronald. We have not talked with the boys' fifth grade teacher, the same in both cases, and perhaps if we did we would discover that she had gotten to know them especially well. If so, however, this knowledge does not seem to accumulate along with the far more impersonal and stereotyped information represented by the marks themselves. Since Keith was never retained in a grade, there was no occasion to make a special study of him before the "case study" made this past spring by school personnel. Here is a transcript of the case study, (because it was received over the telephone, it is not an exact copy):

Keith M., Grade VI June 2, 1966

CA 12/2 M.A. 15/9 IQ 125 Revised Stanford Binet [administered by Esther Edwards]

General Appearance at time of administration of Stanford-Binet: Intelligent, alert, concerned -- eager to grapple with ideas, refusing to let go till he has made a major effort to solve them. Can deal with abstract ideas, mathematical relations; can plan, generalize, and deal with imaginary or hypothesized situations. Honest; does not pretend to knowledge he does not have, nor does he hesitate to admit failure.

Health: Vision passed and hearing passed. Height 60, Weight 92. Has had chicken pox, measles, mumps.

Entered the ________ School in September 1959 in Kindergarten at age 5 years 4 months. Transferred to the ______________________School during Kindergarten. Entered the ____________________ School in September 1964 in Grade 5. Results of city-wide Kuhlman-Anderson Form D of October 1963 are as follows: CA 9/6, M/A 9/4, IQ 98. Scored 7.1 in Word Meaning and 6.4 in Paragraph Meaning on Stanford Reading Achievement Test of April 1966. Absent 3 sessions for school year 1965-66. Present report card indicates B's and C's. Child is described by the teacher as oversensitive, sulky, and discourteous.

TABLE V Marks for Keith

	Absent	Tardy	Truant	Conduct	Effort	Comprehension	Oral Reading	Silent Reading	Literature	Written English	Oral English	Spelling	Writing	Number Facts	Mental Arithmetic	Written Arithmetic	Geography	History	Science	Music	Art	Health	Physical Education	Industrial Arts	Respect for Righst of Others	Respect for Authority	Cooperation	Courtesy	Self-Reliance	Quality of Workmanship
II 1961-62	12	0	0	C	B		C-	C		C	B	C	C	B	B	C														
III 1962-63	0	0	0	B	B	C-	C-			D	C	C	B	B	B	B									S	S	S	S	S	S
IV 1963-64	2	3	0	C	B	C-	C+	C-	B-	B-	B-	B	B		B+	B+	B	A	B	B	B	B	B		S	S	S	S	S	S
V 1964-65	10	1	0	A	A	B	B		B	A	B	B	A		B	A	B	B	A	A	A	A	A	A	A	A	A	A	A	A
VI 1965-66	3	0	0	B	B	X	C	C	C	C	C	C	B	X	B	B	C	B	A	A	A	A	A	B	S	S	S	S	S	S

TABLE VI Reading Scores for Keith

January, 1961	Detroit Word Recognition	12	I
March, 1961	Detroit Word Recognition	27	I
May, 1961	Detroit Word Recognition	31	I
September, 1961	Gates Primary	2.3	II
September, 1962	Diagnostic Reading	2.5	III
September, 1963	Durrell Sullman	3.3	IV
June, 1966	Stanford Achievement W.M.	7.1	VI
June, 1966	Stanford Achievement P.M.	6.4	VI

[Insert California Achievement Test Scores Here.]
See Table IV (Page 69)

Conclusions:
1. Child is of superior intelligence.
2. Rapid rate of mental growth.
3. Chronologically correctly placed in Grade VI.
4. Mentally advanced for Grade VI.
5. Achievement in reading below level of mental capacity.
6. Achievement in arithmetic above present grade level.

Recommend: Promote to Grade VII.
Refer to a reading consultant.

The reader will recognize the figures given for the Stanford-Binet and the examiner's comments on "general appearance" as having been supplied to the school personnel by our own examiner, a member of our investigating team. The school included our Stanford-Binet test scores and observations in their case studies of all five of the children we tested, including Ronald. How globally the idea of intelligence is construed can be inferred from the school's conclusions.

Keith's Grade VI teacher's description of him as oversensitive, sulky, and discourteous seems to us to be even more off the mark than the equivalent description of Ronald was, and yet again one can see how the teacher might have selected these labels from those provided in the check list. This same teacher marked Keith 'S' (satisfactory) in Courtesy on the Final Report, as shown in Table V. In our own experience Keith was always very courteous. We can imagine that his questionning, his insistence on definiteness, and his defensiveness have all contributed to the picture of him as oversensitive, sulky, and discourteous.

If the reader will turn back to the California Achievement Test scores in Table IV, he will note they generally meet the differential expectations we would have for Ronald and Keith at this point. The one exception to this might be reading, in which Ronald scored higher this fall than he did on the California test last spring. (No score from this fall is available at this writing for Keith.) Ronald did better than Keith in language and in spelling, while Keith did considerably better in arithmetic reasoning and computation.

A comparison of the two boys' grades over their elementary school years shows

Keith to have been meeting the teachers' expectations somewhat more than Ronald in most subjects, and again substantially more so in the several areas of arithmetic. This general pattern too we would have expected, but having said this we must underline our feeling that the two boys look almost the same in these records, or as close as the differences between 'B's and 'C's, or 'C's and 'D's. There is nothing in these grades or the teachers' comments that would help future teachers come to grips with the specific capacities and inclinations of the children.

We have talked briefly with Keith's present seventh grade homeroom and history teacher, but Keith has been in the school only a month and she knows him only a little. Her comments included "nice", "well-mannered", "quiet", "doesn't talk back or speak out of turn", and "doesn't say very much". From the last comment especially, we would guess that Keith is looking over this new situation very carefully. What he will make of it, and what it will make of him, remains to be seen.

CHAPTER IV

Summary and Conclusions

This research set out to investigate children's learning in social studies through case studies of individual children's learning about law. Law, especially certain aspects of civil law and the process of litigation, was taught for some 20 hours in each of two 6th grade classrooms. Five children in each classroom, or 10 subjects in all, were selected in advance of this instruction for intensive study through a variety of tests, interviews, and observations, conducted before, during, and after the instruction. Two of these subjects, both of them Negro boys from intact, lower middle class families in the inner city, were selected for further study and have been written up in this report.

The instruments of the study included a number of tests and interviews designed in relation to the law instruction, and tests and interviews whose use for assessing the children's thinking along certain parameters was already established. These latter included the Stanford-Binet Intelligence Test, the California Achievement Tests, the Abstract Categorizing Test, the Kohlberg Moral Development Interview, the Wallach and Kogan Creativity Test, the Belanger Pendulum Experiments, and the Easton and Hess Questionnaire on Government and Citizenship.

In effect, three major questions were posed in our initial statement of the rationale of this study, and these can serve now to organize our summary and conclusions:

1. How can one describe the process of individual children's thinking in social studies, especially the bearing of their personal conceptions on their interpretation of the material of instruction, and the relationship of their cognitive development to their thinking in social studies?

2. What are the implications of these relationships for teaching?

3. What specific aspects of children's thinking about social phenomena do our case studies point to for further investigation?

The case study method imposes much of the same limitation on the possibility of summarizing our findings that the method was intended to cope with in applying the findings of other studies, viz., the limited susceptibility to generalization of the characteristics of individual subjects' thinking. As would be the case with a written history -- and history has in fact been our deliberate model for much of the conduct of this study -- a good deal of what we have concluded or imagined about our subjects cannot be reduced to a summary, but must be read in conjunction with the data as we have presented it. On the other hand, certain generalizable patterns have emerged, and it is on these that we will concentrate here.

1. The process of the children's thinking. The central purpose of this study was to explore the relationship between individual children's learning in social studies, in this case their learning about law, and the thinking they brought to the instructional situation, especially their individual conceptions of social phenomena and their respective levels of cognitive development. Over the course of the study our idea of the problem itself was transformed. Very simply, we found that the individual characteristics of the children's thinking were more pronounced and more integrated and consistent than we had imagined, and as we realized this we became increasingly less persuaded that we were changing or reconstructing the children's thinking, and more inclined to view our teaching effort itself as part of a protracted inventory and assessment of the children's thinking. This is not to say that the children could not be taught and learn at the more fundamental levels of their thinking, but that we greatly underestimated what it would entail.

At the outset, we now realize, we were looking for fairly discrete conceptions and behaviors of the children, the changing or reconstruction of which we would define as new learning. The multiple choice test and interviews on law with which we "pretested" the children were in a sense paradigms of this first view of things, for each separate item or question stood for something that we thought was important to know about the law, and something we expected the children not to know, or to know only incompletely, before our instruction. In fact, though it seemed pointless to us to administer these or equivalent tests again at the conclusion of our teaching, we can claim that the children did indeed learn something that the tests contained: about what kinds of cases come within the purview of the law, about the roles of lawyers, judges, and jurors, about the steps of litigation before and during a trial, etc. We have not tried to calculate what the children learned in terms of successful completion of our original test items, however, because from the moment we began administering the tests to the children it became apparent that their responses to the items were not in themselves the preconceptions we wanted to pursue and to reconstruct. For instance, some children did, and others did not know at the outset that lawyers might try first to settle a case outside of court, or that a dispute between an employer and his employee might be a proper matter for a court to decide. However, the children's knowing or not knowing these things could not in itself be said to constitute their preconceptions, nor their learning them the reconstruction of these preconceptions, because the questions, and, to a larger extent than we anticipated, the children's answers to the separate questions, reflected our own way of dividing up the world and talking about it. For another purpose this might have been a perfectly appropriate base from which to judge the children or their learning. However, it did not seem to us to represent their individual thinking, though we did not know immediately what would.

With respect to the children's substantive preconceptions, the above remarks apply especially to their specific information about law, and, to a somewhat lesser extent, they apply to the children's attainment or nonattainment of the accepted public meanings of law concepts. In retrospect, we can see in the children's overall performances on the law tests and interviews the effects or evidences of fundamental conceptions the children had, for example Keith's thinking in what we have called "official" terms, but our instruments were not designed with a view to this sort of outcome, and thus item scores do not reflect, or only indirectly and in ways as yet unknown to us reflect these fundamental conceptions. Furthermore, the instruction itself was not designed, our best intentions to the contrary, to affect these fundamental conceptions, since we were only beginning to become aware of them toward the end of the instructional period.

If one asks how the children's basic conceptions limited or facilitated their attainment of specific information and the public meanings of law concepts, we must say we do not know. As this was an implication, or as we see it now a part of our original question, we have made no more progress in this direction than the redefinition of the question itself.

Somewhat similar remarks pertain to our assessment of and influence on the operations of the children's reasoning and judgment, except that we cannot be confident that the children achieved even superficial learnings of this kind. We have no evidence that the children gained in their capacity to analyze the fact patterns of given cases or to analogize between different cases in the manner of a lawyer. For that matter, we have no reason at this point to expect such a gain, given the limited nature of our instruction and the formidable consistency of the children's manner of thinking, as this appeared in our various engagements with them.

In our concern with the idea of learning as the "reconstruction of experience", we at first expected the children to refer to their experience -- to disputes they had witnessed, television programs they had seen, people they had known, and so on -- in their talking with us about law. Except when we asked for it directly, however, this almost never happened. The material we provided dominated the foreground of our discussions, while the children's individual experiences seemed to remain in the background. Gradually we realized what might seem obvious to the reader, that this experience was already constructed or construed (hence the significance of reconstruction) in the children's thinking, and that it was more likely to be represented in the resultant manner of their thinking than in specific episodes of past experience brought consciously to mind.

From each aspect of our original question, we were eventually led to consider the overall patterns of the children's thinking and behavior. The particulars of what Keith had to say about trespassing, or judges, or the government of children marooned on an island, were not in themselves unique, and thus we could not feel that we were engaging Keith as an individual in just attending to these. However, in his regular resort to what he perceived as official procedures for dealing with situations, his disinclination to forecast deviance from role norms and his tendency not to empathize with or take the roles of other people, we began to find consistency in Keith's thinking that distinguished him from our other subjects.

Keith seemed to have different way of handling questions about what people in fact do or have done, and what they would do or could be expected to do. While, again, he expected conformity to norms or roles in the second class of cases, he was exceedingly discriminating with respect to the first. However, this latter recognition that people deviate from roles or norms did not seem to procede from an understanding, much less a tolerance, of the sources of this deviance, so much as it stemmed from his concern with giving exact answers to our questions. Indeed, his explicit concern for the exact truth of matters, his frequent questionning, and his careful monitoring of the examiner for cues, all seemed to be governed by a central preoccupation with the source of truth or authority, resulting in different performances according to what he took to be the source at a given moment or for a given kind of question.

Keith exhibited a high degree of control over level of abstraction in our discussions with him, and he made excellent use of hierarchical systems of concepts, both on tests and in disucssions. His thinking was relatively convergent on most occasions, and correspondingly uncreative in the sense of his not very readily changing set. We speculated that Keith had developed his analytical, convergent way of thinking as a defense against arbitrariness, more than as an instrument of curiosity or exploration. Some suggestions of a fatalistic attitude toward the world, or an expectation of unpredictable interventions or happenings, seemed to be mixed with his posture of control, and it seemed to us that a basic confusion about authority in Keith's family might have been the source or a major cause of his outlook. Keith regarded his father as fair, and did not seem to fear his father as such, but rather certain situations. He told us, for instance, that he was "afraid" to look at his report card before he gave it to his parents, though he could not say what would happen if it was not a good one.

At the same time that Keith was defensive, and, as we have put it elsewhere, on guard to be telling the truth and doing right, he did not appear to be very anxious in school situations. His performances in the pendulum experiments and the Moral Dilemmas interview, quite different tasks in themselves, particularly seemed to exhibit a combination of high defensiveness and low anxiety. Finally, we have commented on Keith's being quite forward and personally engaging and attractive, a "natural" for leadership, except, perhaps, for his confusion and relative lack of understanding about authority.

In Ronald's thinking too it has been necessary to look for patterns, though the particulars, on account of his divergence, are often more striking than Keith's. Ronald regularly seemed concerned to find a reasonable solution to a problem. In so doing, he mixed conventions with invention, usually at a commonsense interpersonal level, and resorted less than Keith to the law and officialdom to deal with problems. He had a greater sense of realism about people's motives and actions (which is not the same as Keith's concern to maintain a differentiated view of what is,) and he had a greater capacity or inclination to view a case from the standpoint of different parties.

Ronald seemed to be less concerned with matters of truth as such, and more interested in the contextual elaboration of an idea. His mode of thought was more that of the story teller and moralist, capable of developing a situation considerably by projection into the roles and feelings of different persons, mixing reality with fantasy, and often incorporating simple moral sayings or conclusions in his speech. His exercizing less control than Keith over level of abstractions, and his being less consistent in the substance of his thought on certain occasions, seemed to be as much a matter of disposition as of ability to control abstraction, that is, Ronald was both less able and less inclined to do so. At the same time, he was generative and inventive in his thinking, and seemed to have a kind of conceptual looseness that one must distinguish from concrete thought in the more pathological sense.

Ronald seemed to be more anxious than Keith in the conventional testing situation, perhaps more anxious in school in general. We do not have direct evidence of this, but have inferred it both on theoretical grounds (Wallach and Kogan's association of anxiety with creativity) and from certain shifts that we noticed in Ronald's performance, when he seemed to become more passive (cf. Keith's active searching for clues) as a function of his perceiving a task to be one of converging on a right answer known to the examiner or teacher, but not to him. His pendulum performance was an exception to this, possibly because he grasped at once that he had been given the means to find out how the pendulum worked, or because his attention was shifted from the examiner to the pendulum-as-object, the reverse of the shift observed midway through our discussion of the Moral Dilemmas and, possibly, toward the end of the Creativity tests. On the other hand, Ronald appeared to be less defensive than Keith, which we construed to mean not only that he was less concerned with the possibility of error (or, to put it differently, that he recognized a larger domain of thinking in which his answers did not have to be right,) but also that he was more defenseless when he perceived that he was under attack.

Ronald's moral judgment was more developed than Keith's, especially in his greater capacity to interpret people's behavior in terms of role conformity and deviance, his sense of relativism and mutual respect in people's relations, and his inclination to take an arbitrary starting point for arriving at certain agreements. On the basis of his general inventiveness and his swift development of the concept of liability, we have supposed that Ronald might be more disposed to think of laws and contracts as social constructs. However, this is mitigated by Ronald's not resorting much to law in his thinking, at the same time that it suggests a channel through which one might develop Ronald's ideas of law more readily than another child's.

In Ronald's home life, as in Keith's, we thought we sensed some of the origins of his ways of thinking. The clearest presumption is that his preacher father's talking with him about right and wrong, and urging him to settle things without fighting, has led to Ronald's own emphasis on rational solutions and the development of his moral judgment. Ronald's relatively high anxiety and low defensiveness may have stemmed from the combination of his father's sternness with him, including severe physical punishment, and both parents' overprotection of Ronald when he was a young child. However, while we can feel the fit between Ronald and his home life intuitively, we will be the first to admit our limitations in describing it explicitly. This applies especially to Ronald's divergence or creativity.

It is the potential fit of every aspect of each child we studied, not only in the two children we have presented here but in the eight others as well, that has impressed us most. No detail of a child's performance now seems accidental, and many that,before, we would have overlooked now tell us something about the child. His manner of thinking and behaving, from the standpoints of both development and style, and the substance of his thought, especially the child's basic social concepts, are integrated in a way that seems not only to reflect the circumstances of his past, but to function continuously in meeting and indeed defining the social world that he encounters in the present.

To many a reader this "discovery" of ours will seem naive. The fact of the matter is simply that we did not begin this investigation with the concept of personality explicitly in mind, and thus it seems all the more significant to us that it has been possible, indeed, that it has been necessary to invoke the concept to give meaning to our data. The significance lies especially in the fact that basic features of a child's personality can be seen to appear in and to affect the course of an ordinary instructional interview, though the possibility of one's understanding a given case depends upon observing the child in a wide variety of contexts.

The many advocates of teaching "the whole child", particularly in elementary education, may have meant much of what we are remarking here about the organization of the child's thinking and behavior. We will certainly admit to having been far less concerned than they with the socio-emotional life of the child, and recognize that even our study of Ronald and Keith has been short-sighted in that respect. On the other hand, the whole-child approach, precisely because it has been intended as a counter to a too narrow construction of learning in terms of the mastery of subject-matter content, seems not to have developed the cognitive dimension of personality to the degree attempted in our investigation. Especially as we were predisposed to look for evidences of "cognitive style," our case studies seem to have a considerably more cognitive emphasis than others we are aware of in the education literature (e.g., Sears and Sherman, 1964).

Just now, as we are writing this summary and conclusion and are examining the literature on personality, we have come across Smith, Bruner, and White's Opinions and Personality (1956), ironically a followup (specifically so with some of its subjects) of the same Lives in Progress (White, 1952) that we cited for its case study technique in our opening chapter. The parallels between Opinions and Personality and our own investigation, in both their method and their general conclusions, are considerable. Smith, Bruner, and White studied the thinking of 10 men on the subject of Russia, and analyzed this thinking in relation to the men's life histories and their performance in a variety of tests and interviews, for example, the Rorschach Test, the Wechsler-Bellevue Test of Adult Intelligence, and the Vigotsky Test. "Look far enough into the origins of any opinion," the authors argued, "and one will find not just an opinion but a sample of how the holder of the opinion copes with the world" (Smith, Bruner, and White, op. cit., p. 40). In a manner very similar to our own they developed patterns in individual subjects having to do with the abstractness of their thinking, the subjects' expressiveness, their defensive and adjustive strategies, and so on. The authors looked closely at the need fulfilling functions of these patterns, but they shunned a full-blown interpretation in terms of need fulfillment, and stressed instead the more parsimonious concepts of personal style and consistency.

Of course there are many differences of detail between Smith, Bruner and White's study and ours, but there are some larger differences as well that should be noticed. In the first place, their subjects were adults and ours were children. If there was some question in the mind of the reader of Opinions and Personality as to how early the style of a person might be identified in his thinking about social phenomena, our own study suggests that it is becoming manifest at as early as 12 years of age. Secondly, Smith, Bruner, and White's study did not begin as a deliberate effort to teach their subjects something, though they did present counterarguments to their subjects' opinions in a Stress Interview. We have placed little emphasis in the present writeup on our own teaching, from the standpoint of claiming to have taught our subjects anything significant, but we were dependent on it nonetheless for our inventory of the children. It seems to be particularly the case with children that, because of both their more limited fund of information and their less developed repertoire of complex schemata for presenting their ideas to others, one must make greater use of differential responses to instruction as a basis for studying their thinking. It has been one of the major weaknesses of virtually all of the research on children's concepts cited in Chapter I that it did not attempt to teach the children anything.

Perhaps the most fundamental difference between our two studies is that Smith, Bruner, and White had the concept of personality in mind from the very outset of their research, whereas we arrived at it inductively. For us this has the advantage of persuasiveness, and we have tried to convey to the reader too some of the sense of discovery that we experienced. Smith, Bruner and White, on the other hand, worked with a more powerful set of analytical concepts, grounded in personality theory, than we have used to present and analyze our data. The relevance to our own research of their characteristics of the "object of a sentiment" (we have been saying "conception of law"): differentiation, saliency, time perspective, informational support, and object values, we can appreciate and claim to have approached partially in our analysis, but a further study by us would need to use such concepts deliberately. This is equally true of another set of concepts they develop, object appraisal, social adjustment, and externalization, as the principal functions of one's holding an opinion. These last concepts are particularly useful in that they suggest a way of approaching a question that we have been obliged to consider all along, the implications of our research for education. To this question we will turn next.

ii. Implications of the case studies for us as teachers. The first implication is the easiest to state: we need to study our pupils more closely and more objectively than the classroom ordinarily allows. In saying this we do not overlook the fact that Ronald's and Keith's sixth grade teacher made some discriminating observations about his pupils, such as his characterization of Ronald as an "uninhibited dreamer" and his remark that Keith was especially prone to "put up a fight". These observations, however, have two failings. In the first place, they are not set in the larger patterns of the children's style in such a way that one can see how they might bear on the children's learning and thinking. Secondly, the teacher's observations are moralistic, especially in the manner that they were conveyed to us; as such, they inhibit understanding.

Perhaps we, the investigators, should admit at this point our real ignorance of how much teachers do actually know about their pupils. It might be more than we suspect in some cases, and the question would certainly be worth researching. For the present, a number of factors in the conventional school situation lead us to doubt that teachers could know their pupils very well.

Any teacher would say sheer time is required for knowing his pupils, especially time to spend with a child individually or in a small group. To this we would add the time we have spent reflecting on our hours with the children, time which in fact greatly exceeded these first hours, though it may be that practice would make the process more efficient.

It will also be agreed that teachers do not have in their repertory the instruments one requires to obtain a many sided picture of the child, indeed, that the instruments we ourselves used need to be refined in various ways. We have long felt that school specialists need to be trained for clinical analysis of the child's learning and thinking. Much of the value even of a standardized instrument derives from the experienced examiner's capacity to make qualitative observations, based on the subject's interaction with the examiner, and so on, that are not represented by the scores themselves.* Perhaps specialists in the different subject areas of a school, language, arts, mathematics, social studies, and science, should each conduct certain observations and then should pool their analyses with those of a testing and guidance specialist, in case reviews of selected children.

Another factor mitigating against teachers' knowledge of their pupils is the vocabulary or categories of conventional school observations and ratings. The check list of traits which teachers in Ronald's and Keith's school system must apply to their pupils is an especially blatant example of this. Likewise, the use of letter grades and the uncritical use of "intelligence" scores are examples that readily come to mind. A more subtle example, perhaps, is the term "creativity". The present author must admit that, until midway through this investigation, "creativity" held little significance for him in relation to social studies, partly because the connotations of the term tied it more closely to the purposes of the arts than to those of science. Now it is more clear to him that creativity embraces capacities, like those we have called generativeness and ability to change set, that are highly relevant to social studies and, furthermore, that are contributors to intelligence, in the larger sense of that term which "intelligence" tests fail to recognize. Thus Wallach and Kogan's vying with Goetzels and Jackson to establish that creativity is indeed distinct from intelligence seems in one way only to harden the arbitrary separation of function that the intelligence tests have laid down. It would be better to name the capacities involved more descriptively, and then to examine, as well as their separate tendencies, how they overlap or reinforce one another in behavior that we would call "intelligent" or "creative". In another context (Grannis, 1965) we have argued similarly for the substitution of the terms "intracase" (or intra-instance) and "intercase" for certain usages of the often misleading and value laden terms, "concrete" and "abstract", and we might better have made this substitution for certain of our observations about Ronald and Keith. Other examples could be adduced indefinitely. Both for the teacher and the clinical specialist, the amelioration of this problem of categories will procede only as more satisfactory instruments of observation are developed.

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*After Professor Belanger had concluded his series of pendulum experiments with each of our case subjects in the first experimental class, he recorded his analysis of the subjects without naming them until the end. We were quite dumbfounded by the congruence of many of his observations with ours, even to the choice of terms to apply to particular children, though the instrument with which he worked was quite different from ours. He had, furthermore, spent little more than an hour with each child individually, and on the other hand had administered the series of experiments to several hundred children all told. It was unfortunate that we ourselves had to administer Belanger's experiments to Ronald and Keith, though at least in our observation of Keith the reader may find some of the surplus value we are alluding to.

Still another factor limiting the teacher's knowledge of, and let us say effectiveness with his pupils seems to us to be especially a problem of social studies, though teachers in other areas are not exempt from it. This is that so much of the teaching, when it is not sheer telling or conduct of recitation, consists in orchestrating what is euphemistically called a "class discussion". In this affair the children's individual characteristics may well come into play, as the teacher now calls on a tuba and then tricks a viola sound out of a violin. In a few classrooms, a teacher may even succeed in staying in phase, so to speak, with the thought processes of several children simultaneously, as he plays them against himself or one another. For the most part, however, and this includes most even of the "new" social studies as we have observed it, there seems to be a very large discrepancy between the "picture" or the "model" that the teacher fashions through discussion, and the thinking of the individual children.

This discrepancy is largely an inference from the complicated, often tortuous maneuvers teachers execute in order to get their students to say the right thing, "right" being defined sometimes in terms of information or a generalization, and sometimes in terms of a process of thinking. Tests of information retained by the students under these circumstances tend to be comforting. The explanation for this learning, from the standpoint of the objection being raised here to class discussions, is simply that a given fund of information (of the kind involved in social studies) can be assimilated to a virtually infinite variety of interpretations resulting from different processes or basic conceptions and styles of thinking. This can be seen, for instance, in Ronald's and Keith's equally well informed memories of the Golfcourse Case, though the two boys did not use their information in the same way in their subsequent thinking about the Lumberyard Case. Tests of thought process in social studies are for the most part very inadequately developed (Massialas and Cox, 1966), but where they have been employed, they have cast considerable doubt on the efficacy of the general class discussion. This is even true in those projects of the new social studies which have gone to the greatest lengths to develop strategies for teachers' conduct of class discussions.*

In our present continuation of the project that last year studied Ronald and Keith, we are attempting to come to grips with the problems discussed so far in three related ways. First, in common with all the new social studies projects, we are endeavoring to define and to present to the children an alternative to the ways of thinking about social phenomena that they bring with them to our classroom. It is to be an alternative not in the sense of simply rejecting what the children bring, but in being more complex, both in its options and in its constraints, than their original thinking. Our own conception of such an alternative involves, again in common with many other projects, systematic thinking in a social science framework; (we have selected anthropology to teach in a seventh grade social studies course.) For strategic reasons, our present conception

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*In her evaluation of gains at various grade levels from a year's instruction in the Contra Costa County social studies curriculum, Taba (1965) obtained statistically significant differences between her experimental and control subjects on a posttest of capacity to make correct inferences from stories. However, the mean scores and standard deviations are not reported, and one thus has no way of judging how close the experimentals approached to a criterion of learning or mastery. Given the large sample of subjects, quite a trivial gain could be "significant" in the sense of demonstrating simply that something happened over the course of the year. It should be observed that Taba herself is very much concerned with the effectiveness of class discussion for developing individual capacities. She has defined strategies for teachers' alternately developing discussion at a given level of abstraction or generalization and then "lifting" the thought to a higher level, in order to involve as many children as possible in the generalization process. She has furthermore analyzed actual discussions in these terms, and has compared individual children's performances in the discussions with their performance on the social studies inference test. Unfortunately, one is not given the actual numbers or percentages of children participating at a given level in the models and examples of discussion that Taba presents. Evidence is presented of a significant correlation between post-test performances on the inference test, and individual rates of participation in discussions at both the beginning and the end of the experimental year. However, while Taba justifiably concludes that this demonstrates that the discussion contributed to the gain of some students, it is also evidence that students who did not participate, despite the teachers' elaborate strategies, did not gain. How many students and how much gain is involved, again, we do not know. Taba concludes her study on much the same note as ours:

> Studies of thinking will remain defective as long as they focus only on

[see footnote below]
differs from that of the three efforts already cited,/in placing more emphasis on the explicit definition of a model of analytic concepts, rather than on a more general process of critical thinking or constructing generalizations (cf. Fenton, 1966, for a similar emphasis). Both convergent and divergent thinking, role taking and objectification, and intercase and intracase thinking, are required to use a social science model. The reconstruction of the children's thinking must consist in complementing what each brings in the way of style and basic conceptions.

The second aspect of our attempt to teach the children as individuals consists in our assessing characteristics of their thinking that we think may be relevant to their capacities for using a social science model. This has so far involved our administering to this year's subjects the Stanford-Binet Intelligence Test, items from the Wallach and Kogan Creativity Tests, the pendulum problem (this time in Piaget's version), 6 of the 10 Kohlberg Moral Dilemmas, and the Abstract Categorizing Test. Further testing will be required, apart from that based on the anthropology materials as such, as our own category scheme develops.

> the nature and quality of inferences, predictions, and of relationships perceived by the students. The center of dynamics of thought seems to lie beyond these end-products; namely, in the processes individuals employ in arriving at them. Much remains to be done in describing these ways of arriving at the answers required in tests on classroom discussion (Taba, op. cit., p. 179).

That Oliver and Shaver (1966) arrived at a somewhat similar conclusion from their analysis of the interaction of teaching style, student personality, and learning, we have already indicated. Their study did demonstrate significant gains (in both senses of significance) in students' capacities both to analyze orally and to conduct discussions of controversial social issues. However, as the authors point out, the teacher-directed classes in which the students were instructed in discussion included only 12 children each. Furthermore, the rate or timing of both learning and forgetting of the discussion process, together with the students' significant but generally trivial gains on written tests of analytical competence, suggest that the learning might have been quite specific to certain instructional contexts. Again, we are arguing that to achieve even a minimum capacity for critical thinking and discussion, as many of Oliver and Shaver's subjects may have failed to do (actually, no criterion of achievement or minimum performance is indicated,) major provisions would have to be made for individual students.

The experiments conducted by Massialas and his colleagues (Massialas, 1963) did not obtain significant differences of any kind in comparing the performances of experimental and control groups on written tests. The investigators supply some exciting transcripts of teacher-directed class discussions, but one has no

Third, we are developing certain materials for individual instruction. These will be materials that the children can procede with at their own rate, and that will be, we hope, susceptible to an analysis of the children's differential performance in terms of what we have learned about the children from our testing. Individual tutoring and small group discussions and projects will be our means of differentiating the instruction for individuals.

It would be folly not to recognize the limits that our effort and the children's will encounter. Because, in our own analysis, both the possibilities and the limits of what we may do have been suggested to us by our confrontation with the children as persons, we return now to the several functions of "holding an opinion" that Smith, Bruner and White developed in their analysis of opinions and personality.

"Object appraisal", which Smith, Bruner, and White use in the same sense as the psychoanalysts' "reality testing", is "the process whereby the person develops attitudes that are a creative solution to the problems posed by the existence of disparate internal demands and external or environmental demands" (Smith _et al_, _op_. _cit_., p. 41). These attitudes, in turn, aid one in "classifying for action the objects of the environment, and they make appropriate response tendencies available for coping with these objects" (_Ibid_., p. 41). Though Smith, Bruner, and White do not put it quite so plainly, the term 'appropriate' is the key to this formulation. "Externalization", too, involves classifying objects for action, but presumably the result is not a real solution to the problems one perceives, so much as a temporary staving off or release of the feelings generated by the internal problems.

"Social adjustment", a more subtle function, or family of functions, served by holding an opinion, is the process by which one "identifies with or differentiates himself from various reference groups [including membership groups] in the population" (_Ibid_., p. 42). Smith, Bruner, and White emphasize that this process is not motivated by a simple need to conform or rebel, but that it may

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idea from these how many students participated in what way. The authors themselves observed, though without the crucial documentation, that some students appeared to learn more than others as a function of individual dispositions toward the process involved.

involve the requirements of "ego defense, dependency needs, drives for autonomy, hostility, drives for status, and many other dynamisms" (Ibid., p. 43).

Finally, "externalization"

> occurs when an individual, often responding unconsciously, senses an analogy between a perceived environmental event and some unresolved inner problem. He adopts an attitude toward the event in question which is a transformed version of his way of dealing with his inner difficulty. By doing so, he may succeed in reducing some of the anxiety which his own difficulty has been producing (Ibid., p. 43).

In both our own observation and Smith, Bruner, and White's, the holding and expression of an opinion seems to serve all three of the basic functions indicated here at once. Different functions may be dominant in one person or another, or, as we have noticed in our analysis of Ronald and Keith, there may be a shift from the dominance of one to the dominance of another function within a single episode of one person's thinking.

Is there any way of saying under what conditions one or another of the different functions of holding an opinion might be dominant in the classroom, or in a person's instruction? We are not even sure what this question means, much less are we certain of any answer to it. Nevertheless, we cannot avoid framing in these terms our earlier question about the limits of instruction, for it seems to us, intuitively, that a disproportionate amount of children's effort in most, if not all, classrooms is involved in social adjustment and externalization.

Perhaps it is misleading to speak disparagingly of the "amount" of effort involved in social adjustment, for we do not want to underestimate the importance of, and the opportunity for a child's definition of himself by reference to individuals and groups he engages with or discusses in the classroom: children and adults, boys and girls, Negroes and whites, Americans and Asians, the middle class, the Romans, citizens, students, and so on. However, much of the adjustment that school engenders may be quite dysfunctional in relation to those subjects which we intend to be the objects of a child's appraisal in school. We may "mean" to get children thinking about, say, the Constitution or a balance beam, but the children's "effort after meaning" toward these subjects gets subverted by their effort to find meaning of a different sort, a pattern of ideas or behaviors that will enable them to survive, if not to distinguish themselves, in their competition for the approval of those with power and rewards: the children's teachers, their parents, and their peers. Holt (1964) has described with savage insight how children are inhibited from object appraisal, as we would put it, by their strategies to protect their opinions from the hazards of being wrong in the classroom. Henry (1963), in his analysis of "the witch hunt syndrome," has done equal justice to another aspect of the matter, how children become participants in even the more reprehensible of the teacher's strategies to maintain social control of the classroom. Both Holt and Henry are writing about relatively favored schools for middle and upper middle class children, schools where it "could not happen here," though it does, in fact, happen much of the time. Ronald and Keith have attended schools where, though the specific patterns are different, the exigencies of social adjustment work even greater havoc in the children's learning. Of course, the children *do* learn. They do appraise objects. What they learn, however, or the object of their appraisal, is "the system" represented by the school and the various crippling ways in which they can adjust to it or fail.

We have attempted to make a case for the influence of life in the family on the basic conceptions and styles of Ronald's and Keith's thinking, so our intention now is not suddenly to claim that the school accounts for it all. For that matter, we have seen various strengths, as well as limitations, in the thinking of each of the children. What we are suggesting -- and it is an inference only from the juxtaposition of the children's school records, what we know about them personally, and our experience with schools generally -- is that the children's individual strengths have at best only ineffectively been engaged in object appraisal or reality testing in the school.

In the final analysis, our hypotheses about the conditions in school that might favor object appraisal in children's thinking amount not just to the procedures being followed in our current experimental attempts to individualize instruction, but to a radical redesign of the entire environment of the school, especially the roles of teachers and learners in relation to different kinds of tasks or problems they confront (Grannis and Oliver, 1965). For the present, let us make just two observations. First, it goes without saying that to reduce the need for externalization in children's thinking in school, one must somehow mitigate the conditions that produce anxiety in the classroom. Secondly, and this point meshes with the first, to change the quality of social adjustment in the school, and to increase the opportunity for object appraisal, one must reduce the arbitrariness of the relationship between the system of the school and the way the world -- including the Constitution and the balance beam -- works. This arbitrariness confronts the child in the discrepancy between the sets of facts he must learn for tests, and the sets that matter in his own construction of things. It appears more subtley, but to no less effect, in the discontinuities of everyday classroom discussion. One does not have to blame teachers themselves for this. Above all, it is the result of the absurd conditions under which teachers and children are expected to understand and communicate with one another.

There will be no disagreeing that the experimental investigator needs to know all he can about his subjects' basic conceptions and styles in order to know how these affect, and are affected by, instruction. Is it actually necessary, however, for a teacher to have this knowledge about his pupils? More specifically, is it necessary in order for object appraisal to occur in a pupil's thinking? Until we have evidence to the contrary, we will argue that a teacher's having this knowledge will facilitate the child's progress. On the other hand, we do not want to imply that the teacher alone takes the lead in this. We have gradually come to the realization that, when anxiety or defensiveness is not too aroused in a child, and when he thinks he can get information on something that matters to him, the child himself will engage in appraisal or testing, whether the experimenter or teacher knows the object of this testing or not. Smith, Bruner, and White give a fascinating account of a shift in their own interpretation of this process, which parallels the shift we reported earlier in our interpretation of Keith's interaction with us:

> The terminology that we finally adopted reflects the change in our thinking. In place of "ego defenses" we adopted the term "adjustive strategies"; for "opinion defense" we substituted the phrase "opinion maintenance and furtherance." Part of the process is, of course, narrowly defensive. But there is also a considerable amount of continuous "monitoring" of attitudes with the object of testing their fit not only to reality but also to inner requirements. When one looks carefully at the verbatim transcript of an interview in which a man is discussing his opinions of some matter that interests him, one notes a series of "testings" of the conformance of expressed opinions both with deeper

> and more general values and with available information. Insofar as the person is in the habit of thinking aloud, so to speak, the process is the more noticeable. We may assume that the same process goes on continuously in the course of dealing with the environment (Smith _et al_, _op_. _cit_., p. 45).

This is not saying simply that a person is "curious". The conditions of testing's occurence are more stringent, and at the same time the process seems more profound than the term 'curiosity' ordinarily suggests. We do not mean to say either that all persons are disposed to testing to the same degree or under the same conditions. Ronald and Keith obviously were not, though the particular process of each child's testing has only begun to come clear to us.

As we think back to the Lumberyard Interview, it seems to us now that both Ronald and Keith were testing, not merely exhibiting, their opinions; ultimately, what we have called their basic conceptions. In this light especially it appears that the attempt of the interviewer not to reveal his own opinion, or not to advocate a counter opinion, might be a shortcoming of our approach. Not only, as we have already recognized, may it be important to study the differential responses of the children to instruction, rather than trying to capture their thinking in a moment of stasis. If the children themselves are perceived as testing, it is vital that they be responded to with feedback.

What we have just said about our posture as examiners applies equally, if not more so, to our role as teachers. Even before we know, indeed as a condition of our ever really knowing the basic conceptions underlying our pupils' thinking, we need to respond to their individual expressions of opinion as if they themselves were testing reality. This _does_ mean responding to _their_ thinking, which in the first instance means responding to what they say, not what we want them to say. While it will indeed take time to tune into what they are saying, we can support their appraisal of things from the very outset.

iii. _Hypotheses for further investigation_. The purpose of this last section is not to raise a new set of questions, but to state succinctly the major hypotheses which have been developed or implied in the foregoing analysis. We recognize that other investigators are already pursuing these hypotheses in one form or another. The value of listing them here lies chiefly in underscoring the possibility that these hypotheses might have a bearing on our own understanding and affecting of children's thinking about social phenomena.

1. Different aspects of children's thinking are revealed as the investigator (or teacher) changes his role in relation to the children, or as the children perceive the investigator in different roles. (For example, a particular child may be more inclined to empathize with other persons when he believes he is not being tested than when he thinks he _is_ being tested.)

2. The shifts in a child's behavior within given performances, as a function of the child's changing perceptions of a task or the investigator's role or purpose, are as characteristic of an individual child as his modal behavior across these performances. (For example, a particular child may consistently shift from monitoring an investogator's questioning to resisting the questioning as the investigator increases his pressure on the child.)

3. Under certain conditions a child's behavior in an instructional interaction with a teacher (or investigator) includes reality testing or object appraisal. The greatest learning will occur when the child is most engaged in reality testing.

4. The social "reality" or object a child perceives and tests is partly a function of basic social conceptions learned in the home. These are not just standard conceptions of the child's culture or subculture, transmitted through the family, but reflect individual characteristics of homes or families as well.

5. A child's "cognitive style" results partly from his individual adaptation to conditions of his family life. This style is manifested in a child's everyday school performances, as well as on special tests of cognitive style.

6. A child's use of certain logical operations or forms of thought, particularly hierarchical ordering and generalization, is a function not only of his ability, or cognitive development, but also of his disposition or style.

7. It is children's basic social conceptions and styles that must be reconstructed if education is to be a reconstruction of the children's experience, and if children's ways of construing new experience are to be fundamentally altered. The possibility of this reconstruction depends upon the teacher's fostering of reality testing, that is, the children's testing the adequacy of their basic social conceptions and styles for understanding reality. Differences between individuals will probably not be reduced in this process, but individual conceptions and styles will become more complex and capable of a larger range of alternative constructions of experience.

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